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| http://stats.bls.gov/ppihome.htm | THURSDAY, |
| JANUARY 9, 1996. (E.S.T), |  |

Producer Price Indexes - December 1996
The Producer Price Index for Finished Goods advanced 0.5 percent in December, seasonally adjusted, the Bureau of Labor Statistics of the U. S. Department of Labor reported today. This followed increases of 0.4 percent in both November and October. Prices received by domestic producers of intermediate goods rose 0.4 percent in December after increasing 0.2 percent in the prior month. Prices for crude materials advanced 4.2 percent following a 1.8-percent gain in November. (See table A.)

Among finished goods in December, the index for energy goods rose 3.1 percent following a 2.3-percent rise in the prior month. Prices for
finished goods other than foods and energy increased 0.1 percent following a similar rise a month ago. The index for finished consumer foods fell 0.1 percent, the same as in November.

Table A. Monthly and annual percent changes in selected stage-of-processing price indexes, seasonally adjusted

## Finish <br> ed

goods

| Except | Change in <br> finished <br> goods | Inter- |
| :---: | :---: | :---: |
| foods | from 12 <br> and <br> months <br> agergy | mediateCrude |
| ago | goods goods |  |

(unadj.)

| 1995 | 0.6 | 0.1 | 3.8 | 0.1 | 2.3 | 0.2 | 1.6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 1996 |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Jan. | 0.2 | -0.4 | 2.4 | -0.1 | 2.2 | 0.2 | 2.3 |
| Feb. | -0.1 | -0.2 | -0.9 | 0.1 | 2.0 | -0.5 | 1.6 |
| Mar. | 0.5 | 0.8 | 2.6 | -0.1 | 2.4 | 0.1 | -1.4 |
| Apr. | 0.2 | -0.5 | 2.7 | 0 | 2.4 | 0.4 | 4.5 |
| May | 0.2 | 0.2 | -0.4 | 0.3 | 2.3 | 0.5 | 1.1 |
| June | 0.2 | 1.8 | -2.4 | 0.1 | 2.7 | -0.5 | -2.1 |
| July | -0.1 | 0.1 | -0.6 | 0 | 2.6 | -0.3 | 2.7 |
| Aug. | $r 0.4$ | $r 0.8$ | $r 0.7$ | $r 0.1$ | 3.0 | 0.2 | $r 0.7$ |
| Sept. | 0.2 | $r 0.3$ | $r 0.1$ | r0.2 | 2.9 | $r 0.2$ | $r-2.7$ |
| Oct. | 0.4 | 0.8 | 1.9 | -0.3 | 3.0 | 0 | -0.6 |
| Nov. | 0.4 | -0.1 | 2.3 | 0.1 | 3.0 | 0.2 | 1.8 |
| Dec. | 0.5 | -0.1 | 3.1 | 0.1 | 2.8 | 0.4 | 4.2 |

r=revised. Some of the figures shown above and elsewhere in this release may differ from those previously
reported because data for August 1996 have been revised to reflect the availability of late reports and corrections
by respondents.
Before seasonal adjustment, the Producer Price Index for Finished Goods rose 0.2 percent in December to 132.7 (1982=100). From December 1995 to December 1996, the Finished Goods Price Index rose 2.8 percent after increasing 2.3 percent in calendar year 1995. Prices for finished energy goods advanced 12.0 percent in 1996 after increasing 1.1 percent a year ago. The index for finished consumer foods increased 3.4 percent in 1996
following a 1.9-percent rise in the prior year. Prices for finished goods other than foods and energy advanced 0.6 percent in 1996 after increasing 2.6 percent in calendar year 1995. At the earlier stages of processing, the index for intermediate goods rose 0.8 percent after gaining 3.3 percent in 1995. Prices for crude materials moved up 12.2 percent in 1996 following a 5.5-percent rise in the prior year.

Finished Goods
The Producer Price Index for Finished Energy Goods rose 3.1 percent in December after increasing 2.3 percent in the previous month. Prices for gasoline advanced 5.2 percent following a 2.8 -percent gain in November. The index for home heating oil rose after falling in the prior month. Prices for residential electric power fell slightly less than a month ago. By contrast, the index for residential natural gas advanced 1.7 percent after rising 3.8 percent in November.

Table B. Monthly and annual percent changes in selected price indexes for intermediate goods and crude goods, seasonally adjusted

r=revised. Some of the figures shown above and elsewhere in this release may differ from those previously reported because
data for August 1996 have been revised to reflect the availability of late reports and corrections by respondents

Prices for finished consumer goods other than foods and energy increased 0.2 percent after remaining unchanged in November. From December 1995 to December 1996, this index rose 0.7 percent after increasing 2.8 percent in the previous year. In December, prices for sanitary paper products turned up 0.9 percent after declining 0.7 percent in the prior month. The indexes for book publishing, newspaper circulation, and periodical circulation turned up after falling in the previous month. Prices for women's apparel remained unchanged after declining a month ago, and prescription drugs rose more than in November. By contrast, the index for cosmetics remained unchanged after gaining 1.0 percent in the prior month. Prices for passenger cars and light trucks rose less than a month ago. The indexes for men's and boys' apparel and household furniture turned
down after rising in the previous month. Prices for household appliances fell more than in November.

The capital equipment index rose 0.1 percent in December following a 0.3 -percent gain in the previous month. From December 1995 to December 1996, this index rose 0.5 percent after increasing 2.2 percent in the previous year. In December, prices for civilian aircraft turned down 0.2 percent after increasing 1.2 percent a month ago. The indexes for light trucks, heavy trucks, and commercial furniture rose less than in November. By contrast, prices for communication and related equipment turned up 1.1 percent after falling the same amount a month ago. The indexes for ships and railroad equipment also rose after falling in the prior month. Prices for tools and dies rose faster than in November.

The index for finished consumer foods fell 0.1 percent in December following an equal decline in November. Price decreases for fresh and dry vegetables, dairy products, beef and veal, soft drinks, and pasta products slightly outweighed price increases for fresh fruits and melons, eggs for fresh use, finfish and shellfish, and pork.

Intermediate goods
The Producer Price Index for Intermediate Materials, Supplies, and Components advanced 0.4 percent in December, seasonally adjusted, after rising 0.2 percent a month earlier. The indexes for energy goods and nondurable manufacturing materials rose more than in November. Prices for foods and feeds fell less than in the previous month. By contrast, the index for construction materials remained unchanged after rising a month earlier, and prices for durable manufacturing materials increased the same amount as a month ago. Excluding food and energy, the intermediate materials index rose 0.1 percent for the second consecutive month.

The rise in the index for intermediate energy materials accelerated to 2.5 percent from 1.2 percent in November. From December 1995 to December 1996, this index increased 10.8 percent, about 10 times its rise in 1995 In December, the acceleration was led by the index for jet fuels, which turned up 7.8 percent after falling 7.0 percent in the previous month. Prices for diesel fuel also increased after declining a month earlier. Indexes for gasoline and utility natural gas rose more than in November. On the other hand, the index for industrial electric power turned down 1.1 percent after rising 1.5 percent in the prior month. Prices for commercial electric power also turned down after increasing in November. The index for liquid asphalt declined after remaining unchanged in the previous month. Prices for liquefied petroleum gas rose less than in November, and prices for residual fuel fell more than a month earlier.

The decline in the index for intermediate foods and feeds slowed to 0.1 percent from 2.2 percent in the previous month. After rising 10.3 percent in 1995, the rate of increase for this index slowed to 3.7 percent in 1996. In December, the index for prepared animal feeds turned up 0.5 percent after falling 2.8 percent a month earlier. Prices for flour, confectionery materials, and crude vegetable oils also increased after falling in the previous month. The index for natural and processed cheese fell less than in the previous month, and prices for pork rose more than a month ago. By contrast, the index for beef and veal turned down 1.4 percent after increasing 1.3 percent in the previous month. Prices for fluid milk products fell more than in the prior month.

The index for nondurable manufacturing materials increased 0.2 percent after rising 0.1 percent in November. This index declined 3.1 percent in 1996 following a 5.9-percent advance in 1995. In December, price increases for primary basic organic chemicals, inedible fats and oils, gray fabrics, and nitrogenates outweighed declines for alkalies and chlorine, phosphates, finished fabrics, and woodpulp.

The index for construction materials remained unchanged after rising 0.4 percent in November. This index advanced 1.9 percent for the second consecutive year. In December, the index for softwood lumber turned down 1.0 percent following a 5.4 -percent rise in the previous month. Prices for plastic construction products, millwork, and for asphalt felts and coatings also dropped after increasing a month earlier. The index for gypsum products rose less than a month ago. By contrast, the index for nonferrous wire and cable turned up 1.0 percent after falling 0.1 percent in November. Prices for fabricated structural metal products rose after remaining unchanged in the prior month, and the index for plywood fell less than in the previous month.

The index for durable manufacturing materials rose 0.4 percent for the second consecutive month. Over the year, these prices moved down 1.2 percent after rising about the same amount in 1995. In December, price increases for prepared paint, aluminum mill shapes, copper, copper and brass mill shapes, and aluminum more than offset declines for hot rolled steel bars, plates and structural shapes, cold rolled steel sheet and strip, and for building paper and board.

Crude goods
The Producer Price Index for Crude Materials for Further Processing increased 4.2 percent, seasonally adjusted, after rising 1.8 percent a month earlier. The index for energy materials rose more than in the prior month,
and prices for basic industrial materials turned up after falling a month ago. By contrast, the index for foodstuffs and feedstuffs fell more than in November. (See table B.)

The rise in the index for crude energy materials accelerated to 16.5 percent from 7.7 percent in the previous month. From December 1995 to December 1996, this index increased 43.2 percent after advancing 3.7 percent in 1995. In December, the index for natural gas rose 34.1 percent after increasing 25.1 percent in the prior month. Prices for crude petroleum turned up after falling a month earlier. On the other hand, the index for coal turned down 0.4 percent after rising 0.5 percent in November.

The index for crude nonfood materials less energy turned up 0.2 percent after falling 0.3 percent in the previous month. For the year, this index declined 5.6 percent following a decrease of 4.2 percent in 1995. In December, the decline in the index for iron and steel scrap slowed to 0.8 percent from 6.8 percent a month earlier. Prices for raw cotton turned up after falling a month ago, and the index for copper base scrap rose more than in November. The index for softwood logs, bolts, and timber, however, turned down 0.1 percent after increasing 2.5 percent in the prior month. Prices for gold ores and phosphates also declined after rising in the previous month. The index for aluminum base scrap rose less than a month earlier, and prices for pulpwood logs fell more than a month ago.

The index for crude foodstuffs and feedstuffs fell 4.3 percent after declining 1.9 percent in the previous month. This index decreased 0.9 percent from December 1995 to December 1996 after rising 12.9 percent in the prior year. In December, the index for slaughter cattle declined 8.1 percent following a 2.2-percent fall a month ago. Prices for fluid milk and soybeans also decreased more than a month earlier. Indexes for slaughter hogs and for fresh and dry vegetables turned down after rising in November. Conversely, the index for fresh fruits and melons turned up 11.8 percent after falling 17.7 percent in the previous month. Prices for slaughter broilers and fryers rose more than a month earlier, and the index for corn fell less than a month ago.

Net output price indexes for mining, manufacturing, and other industries
Mining. The Producer Price Index for the net output of total domestic mining industries advanced 12.8 percent in December after increasing 6.8 percent a month earlier. (Net output price indexes are not seasonally adjusted.) The rise in the index for the oil and gas extraction industry group accelerated to 17.0 percent from 8.9 percent in the previous month. Prices for anthracite mining also rose more than a month earlier. The rise in the metal mining industry group, however, slowed to 0.2 percent from 1.3
percent a month ago. Prices for both the bituminous coal and lignite and the nonmetallic minerals mining industry groups turned down after rising in November.

After increasing 2.9 percent in 1995, the Producer Price Index for total mining increased 34.5 percent in 1996 , chiefly reflecting higher prices for the oil and gas extraction and the nonmetallic mineral mining industry groups. In December 1996, the index for total domestic mining stood at 99.7 (December $1984=100$ ).

Manufacturing. The Producer Price Index for the total domestic manufacturing industries turned up 0.1 percent after falling 0.2 percent in the previous month. The index for the measuring and controling instruments industry group increased 0.6 percent after declining the same amount a month earlier. Prices for the textile mill products industry group and for the printing and publishing industry group also turned up after falling a month ago. The index for the food and kindred products industry group fell less than a month earlier, and prices for the primary metal industries group increased after remaining unchanged in November. By contrast, the index for the lumber and wood products industry group turned down 0.3 percent after rising 0.8 percent in the previous month. Prices for the electrical and electronic machinery industry group also fell after increasing in the prior month. The index for the leather and leather products industry group rose less than in the previous month, and prices for the furniture and fixtures industry group remained unchanged after rising in the prior month.

The index for the net output of the domestic manufacturing sector stood at 128.1 in December, 2.2 percent higher than its year earlier level. In 1995, this index increased 3.0 percent. The 1996 rise was led by the petroleum refining industry group which increased 23.2 percent from its December 1995 level.

Other. Among other industries in December, significant increases were registered for the natural gas utilities, nonferrous metal scrap collection, airport and airport services, and domestic deep sea transportation of freight industry groups. Prices declines occurred for the miscellaneous water transportation of freight, radio broadcasting, truck rental and leasing, and miscellaneous waste materials industry groups.

## *****

Producer Price Index data for January 1997 will be released on Friday, February 14, at 8:30 a.m. (E.S.T.) *****
Information in this news release will be made available to sensory impaired individuals upon request. Voice phone: 202-606-7828; TDD phone: 202-6065897; TDD Message Referral phone: 1-800-326-2577.

Effective with the release of January data on February 14, 1997, the Bureau of Labor Statistics will begin using $X-12$ ARIMA seasonal adjustment software (developed by the Bureau of the Census) for performing Intervention Analysis Seasonal Adjustment (IASA). The X-12 ARIMA methodology incorporates a number of technical enhancements that improve the estimation of seasonal factors. This change will affect 16 PPI series. In addition, all remaining Producer Price Index series requiring seasonal adjustment will be processed using X-12 ARIMA software beginning in February 1998. Seasonal adjustment methods in the Consumer Price Index will change in similar fashion.

To request a report that describes the new methodology and its effects on the Finished Goods index, please contact Angelo Maggi on (202) 606-7729 or see "Assessing the Impact of February 1997 Improvements to PPI procedures for intervention analysis seasonal adjustment" in the November 1996 issue of PPI Detailed Report.

> Recalculated Seasonally Adjusted Indexes to be Available on
> February 12,1997

Seasonal adjustment factors for the PPI are recalculated in January each year to reflect price movements for the prior calendar year. This routine annual recalculation may result in revisions to seasonally adjusted indexes for the previous five years. BLS will make available recalculated seasonally adjusted indexes, as well as recalculated seasonal adjustment factors, for the period January 1992 through December 1996, at 8:30 a.m. on Wednesday, February 12, 1997. This date is two days before the scheduled release of the January 1997 PPI on Friday, February 14, 1997.

The recalculated 1992-1996 seasonally adjusted indexes will be available on the BLS Web site at http://stats.bls.gov. The recalculated 1992-1996 seasonal adjustment factors will be available on the BLS ftp site at ftp://stats.bls.gov. Choose the "pub" directory, the "special.requests" directory, and the "ppi" directory. The revised stage-of-processing index factors will be in the file, "sopsf97.txt." The revised commodity index factors will be in the file, "commsf97.txt."

This information may also be requested from the Division of Industrial Prices and Price Indexes, Section of Index Analysis, at (202) 606-7705.

Table 1. Producer Price Indexes and percent changes by stage of processing
(1982=100)


| Nonfood materials except fuel 3/.............\| | 38.758 | 104.6 | 107.5 | 109.2 | 7.1 | 1.6 | 2.7 | -1.6 | 1.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Manufacturing 3/.............................. ${ }^{\text {a }}$ | 34.758 | 96.5 | 99.2 | 101.0 | 7.8 | 1.8 | 2.9 | -2.0 | 1.6 |
| Construction.......................... . . . . . . ${ }^{\text {I }}$ | 4.000 | 194.2 | 198.6 | 198.4 | . 6 | -. 1 | . 7 | 1.5 | -. 1 |
| Crude fuel 4/................................... | 17.197 | 90.2 | 95.1 | 121.9 | 57.1 | 28.2 | -2.7 | 19.8 | 28.2 |
| Manufacturing industries.................... | 3.654 | 88.6 | 92.8 | 116.8 | 51.1 | 25.9 | -2.5 | 17.5 | 25.9 |
| Nonmanufacturing industries................l | 13.543 | 91.7 | 96.8 | 124.9 | 58.9 | 29.0 | -2.7 | 20.2 | 29.0 |
| I |  |  |  |  |  |  |  |  |  |
| Special groupings \| |  |  |  |  |  |  |  |  |  |
| Finished goods, excluding foods..................\|5/ | 76.659 | 130.9 | 131.4 | 131.8 | 2.6 | . 3 | . 2 | . 6 | . 7 |
| Intermediate materials less foods and feeds......\|6/ | 95.144 | 125.7 | 125.8 | 126.1 | . 7 | . 2 | . 1 | . 3 | . 4 |
| Intermediate foods and feeds.......................\|6/ | 4.856 | 132.7 | 127.7 | 127.6 | 3.7 | -. 1 | -2.0 | -2.2 | -. 1 |
| Crude materials less agricultural products 3/ 7/.\|8/ | 53.384 | 102.2 | 106.2 | 117.9 | 23.8 | 11.0 | 1.0 | 5.0 | 10.8 |
| Finished energy goods.............................. ${ }^{\text {/ }}$ | 13.443 | 84.6 | 84.9 | 85.9 | 12.0 | 1.2 | 1.9 | 2.3 | 3.1 |
| Finished goods less energy.........................\|5/ | 86.557 | 140.0 | 140.7 | 140.6 | 1.4 | -. 1 | . 1 | . 1 | . 1 |
| Finished consumer goods less energy..............\|5/ | 61.885 | 140.7 | 141.4 | 141.3 | 1.8 | -. 1 | . 2 | 0 | . 1 |
| Finished goods less foods and energy.............\|5/ | 63.216 | 141.9 | 142.5 | 142.6 | . 6 | . 1 | -. 3 | . 1 | . 1 |
| Finished consumer goods less foods and energy....\|5/ | 38.544 | 144.2 | 144.9 | 144.9 | . 7 | 0 | -. 1 | 0 | . 2 |
| Consumer nondurable goods less foods and energy..\|5/ | 21.852 | 151.6 | 151.8 | 151.9 | 1.1 | . 1 | . 2 | 0 | . 1 |
| Intermediate energy goods...........................\|6/ | 12.503 | 91.7 | 91.4 | 92.1 | 10.8 | . 8 | 1.7 | 1.2 | 2.5 |
| Intermediate materials less energy................\|6/ | 87.497 | 133.6 | 133.4 | 133.6 | -. 6 | . 1 | -. 2 | -. 1 | . 1 |
| Intermediate materials less foods and energy.....\|6/ | 82.641 | 133.6 | 133.8 | 133.9 | -. 9 | . 1 | -. 1 | . 1 | . 1 |
| Crude energy materials 3/..........................\|8/ | 32.219 | 83.8 | 89.1 | 103.8 | 43.2 | 16.5 | 1.5 | 7.7 | 16.5 |
| Crude materials less energy........................ ${ }^{\text {a/ }}$ | 67.781 | 134.8 | 126.2 | 123.4 | -2.5 | -2.2 | -1.7 | -1.4 | -2.8 |
| Crude nonfood materials less energy 4/...........l8/ | 23.736 | 152.9 | 151.6 | 152.4 | -5.6 | . 5 | . 3 | -. 3 | . 2 |

1/ Comprehensive relative importance figures are initially computed after the publication of December indexes and are recalculated after final December indexes are available. The first-published and final December relative importances initially appear, respectively, in the release tables containing January and May data.
2/ The indexes for Aug. 1996 have been recalculated to incorporate late reports and corrections by respondents. All indexes are subject to revision four months after original publication.

3/ Includes crude petrolem.
4/ Excludes crude petroleum
5/ Percent of total finished goods.
6/ Pecent of total intermediate materials.
7/ Formerly titled "Crude materials for further processing, excluding crude foodstuffs and feedstuffs, plant and animal fibers, oilseeds, and leaf tobacco."
8/ Percent of total crude materials.

Table 2. Producer Price Indexes and percent changes for selected commodity groupings by stage of processing
(1982=100 unless otherwise indicated)

| Commodity code | Grouping | Unadjusted index |  |  | \| Unadjusted\| percent\|change to\| Dec. 1996 from |  | ```\|Seasonally adjusted |percent change from:``` |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | Nov. |  |  |  | \| Sept.to | \| |  |
|  |  | \| Aug . |  | Dec. | Dec. | Nov. |  | Oct. to | Nov. to |
|  |  | $119961 /$ | 996 1/ | 1996 1/ | 1995 | 1996 | Oct. | Nov | Dec. |
|  |  | $1$ | - |  | I |  | I |  |  |
|  | \| FINISHED GOODS |  |  |  |  |  |  |  |  |
|  |  | 131.9 | 132.5 | 132.7 | 2.8 | 0.2 | 0.4 | 0.4 | 0.5 |
|  | FINISHED CONSUMER GOO | \| 130.4 | 131.0 | 131.2 | 3.6 | . 2 | . 5 | . 5 | . 6 |
|  | FINISHED CONSUMER FOODS...................................... | \| 135.3 | 135.9 | 135.5 | 3.4 | -. 3 | . 8 | -. 1 | -. 1 |
|  |  |  |  |  |  |  |  |  |  |
| 01-11 | Fresh fruits and melons 2/. | \| 95.9 | 103.8 | 116.0 | 34.1 | 11.8 | 6.8 | -17.7 | 11.8 |
| 01-13 | Fresh and dry vegetables 2/ | 1115.3 | 132.7 | 104.3 | -24.3 | -21.4 | 7.0 | 16.6 | -21.4 |
| 01-71-07 | Eggs for fresh use (Dec. 1991=100) 2/. |  | 114.7 | 129.9 | 15.0 | 13.3 | -4.9 | 12.0 | 13.3 |
| 02-11 | Bakery products 2/. | $\begin{array}{r\|l} . & 104.0 \\ . & 171.1 \end{array}$ | 172.8 | 173.0 | 3.6 | . 1 | 1.1 | . 1 | . 1 |
| 02-13 | Milled rice $2 /$. | $\begin{array}{ll} \mid & 171.1 \\ \mid & 133.4 \end{array}$ | 126.8 | 127.0 | -2.5 | . 2 | -2.9 | -1.6 | . 2 |
| 02-14-02 | Pasta products (June 1985=100) 2/ | . 127.9 | 128.4 | 128.0 | . 9 | -. 3 | 1.3 | . 4 | -. 3 |
| 02-21-01 | Beef and veal. | . 102.5 | 108.6 | 106.6 | 6.7 | -1.8 | 1.4 | 1.3 | -1.4 |
| 02-21-04 | Pork. | . 136.8 | 122.7 | 126.9 | 21.2 | 3.4 | 4.4 | 1.3 | 3.3 |
| 02-22-03 | Processed young chickens | . 127.9 | 126.6 | 125.8 | 5.3 | -. 6 | 1.1 | 2.1 | . 7 |
| 02-22-06 | Processed turkeys. | . 106.7 | 103.4 | 102.2 | -7.3 | -1.2 | -2.6 | 1.3 | 1.1 |
| 02-23 | Finfish and shellfish | . 159.8 | 175.4 | 174.2 | 5.4 | -. 7 | 5.9 | 1.3 | 1.8 |
| 02-3 | Dairy products | . 137.2 | 135.2 | 131.5 | 5.2 | -2.7 | . 2 | -4.5 | -2.5 |
| 02-4 | Processed fruits and vegetables 2/ | . 128.2 | 128.5 | 128.4 | 2.6 | -. 1 | -. 2 | -. 2 | -. 1 |
| 02-55 | Confectionery end products 2/. | . 167.7 | 167.2 | 167.1 | 1.6 | -. 1 | -. 5 | . 2 | -. 1 |
| 02-62 | Soft drinks. | . 133.9 | 134.7 | 134.6 | . 8 | -. 1 | . 6 | -. 1 | -. 1 |
| 02-63-01 | Roasted coffee | . 127.2 | 127.3 | 127.5 | -8.8 | . 2 | . 8 | . 4 | 1.3 |
| 02-76 | Shortening and cooking oils 2/ | . 140.6 | 135.0 | 135.6 | -3.0 | . 4 | -. 2 | -3.4 | . 4 |
|  |  |  |  |  |  |  |  |  |  |
|  | FINISHED CONSUMER GOODS EXCLUDING FOODS. | 128.1 | 128.7 | 129.2 | 3.7 | . 4 | . 4 | . 7 | . 9 |
|  |  |  |  |  |  |  |  |  |  |
| 02-61 | Alcoholic beverages | . 133.1 | 134.0 | 133.9 | 2.8 | -. 1 | . 2 | -. 1 | 0 |
| 03-81-01 | Women's apparel 2/. | . 119.4 | 119.8 | 119.8 | . 9 | 0 | . 3 | -. 7 | 0 |
| 03-81-02 | Men's and boys' apparel. | . 132.0 | 132.3 | 132.2 | 1.1 | -. 1 | . 2 | . 1 | -. 1 |
| 03-81-03 | Girls', children's, and infants' apparel $2 /$ | . 121.8 | 123.8 | 124.3 | 1.3 | . 4 | . 3 | 0 | . 4 |
| 03-82 | Textile housefurnishings $2 /$ | . 123.3 | 123.7 | 123.8 | 3.1 | . 1 | . 2 | -. 1 | . 1 |
| 04-3 | Footwear... | . 142.0 | 142.3 | 142.4 | 1.4 | . 1 | . 1 | . 1 | 0 |
| 05-41 | Residential electric power (Dec. 1990=100). | . 117.0 | 110.5 | 110.4 | . 5 | -. 1 | -. 2 | -. 2 | -. 1 |
| 05-51 | Residential gas (Dec. 1990=100). | . 111.6 | 113.7 | 117.1 | 11.0 | 3.0 | 0 | 3.8 | 1.7 |



| 12-2 | Commercial furniture 2/. | 151.5 | 152.8 | 152.9 | 1.7 | . 1 | . 5 | . 4 | . 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14-11-05 | Light motor trucks. | 158.9 | 162.7 | 163.0 | . 6 | . 2 | -1.2 | . 5 | . 3 |
| 14-11-06 | Heavy motor trucks | 145.7 | 142.7 | 143.1 | -1.6 | . 3 | -4.4 | 1.9 | . 6 |
| 14-14 | \| Truck trailers 2/. | 130.0 | 130.2 | 130.2 | -1.4 | 0 | 0 | . 2 | 0 |
| 14-21-02 | \| Civilian aircraft (Dec. 1985=100) | 148.2 | 148.9 | 148.9 | 2.9 | 0 | . 1 | 1.2 | -. 2 |
| 14-31 | \| Ships (Dec. 1985=100) $2 /$ | 139.6 | 139.0 | 139.9 | 5.3 | . 6 | 4.0 | -3.9 | . 6 |
| 14-4 | \| Railroad equipment. | 137.2 | 136.3 | 136.5 | -. 3 | . 1 | . 4 | -. 4 | . 2 |
|  | \| |  |  |  |  |  |  |  |  |
|  | \| INTERMEDIATE MATERIALS, SUPPLIES, AND COMPONENTS. | 126.1 | 125.9 | 126.1 | . 8 | . 2 | 0 | . 2 | . 4 |
|  | I INTERMEDIATE FOODS AND FEEDS | 132.7 | 127.7 | 127.6 | 3.7 | -. 1 | -2.0 | -2.2 | -. 1 |
|  | \| |  |  |  |  |  |  |  |  |
| 02-12-03 | \| Flour 2/. | 130.5 | 122.5 | 123.7 | -9.1 | 1.0 | -1.5 | -4.1 | 1.0 |
| 02-53 | \| Refined sugar 2/. | 124.8 | 124.1 | 125.2 | 4.2 | . 9 | -2.1 | . 2 | . 9 |
| 02-54 | \| Confectionery materials | 106.9 | 110.1 | 110.9 | 1.8 | . 7 | 5.9 | -. 7 | 1.4 |
| 02-72 | \| Crude vegetable oils $2 /$. | 119.6 | 109.9 | 110.5 | -9.0 | . 5 | -7.7 | -1.3 | . 5 |
| 02-9 | \| Prepared animal feeds $2 /$ | 140.2 | 131.8 | 132.5 | 5.7 | . 5 | -5.2 | -2.8 | . 5 |
|  | \| |  |  |  |  |  |  |  |  |
|  | \| INTERMEDIATE MATERIALS LESS FOODS AND FEEDS. | 125.7 | 125.8 | 126.1 | . 7 | . 2 | . 1 | . 3 | . 4 |
| 03-1 | \| Synthetic fibers 2/. | 111.8 | 111.9 | 111.9 | . 9 | 0 | -1.5 | . 3 | 0 |
| 03-2 | \| Processed yarns and threads 2/ | 114.3 | 114.8 | 114.8 | . 9 | 0 | . 3 | -1.2 | 0 |
| 03-3 | \| Gray fabrics 2/. | 121.4 | 120.6 | 121.7 | . 1 | . 9 | -. 2 | -. 2 | . 9 |
| 03-4 | \| Finished fabrics 2/. | 123.9 | 124.1 | 123.7 | 1.1 | -. 3 | -. 1 | . 3 | -. 3 |
| 03-83-03 | \| Industrial textile products 2/. | 127.8 | 127.9 | 128.4 | 6.1 | . 4 | -. 1 | . 1 | . 4 |
| 04-2 | \| Leather 2/.. | 173.4 | 179.5 | 179.4 | -1.6 | -. 1 | -2.8 | 4.4 | -. 1 |
| 05-32 | \| Liquefied petroleum gas $2 /$. | 80.8 | 102.7 | 112.2 | 67.7 | 9.3 | 18.4 | 10.9 | 9.3 |

See footnotes at end of table.

Table 2. Producer Price Indexes and percent changes for selected commodity groupings by stage of processing - Continued (1982=100 unless otherwise indicated)




[^0]1Table 3. Producer Price Indexes for selected commodity groupings (1982=100 unless otherwise indicated)

| I |  | Unadjusted index 1/ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Commodity | Grouping |  |  |  |
| code \| |  | Aug. 1996 | Nov. 1996 | Dec. 1996 |
|  |  |  |  |  |
| \| | Finished Goods (1967=100) | 370.3 | 371.9 | 372.3 |
|  | All commodities...... | 128.3 | 128.1 | 128.8 |

## MAJOR COMMODITY GROUPS




| 02-7 | \| Fats and oils. | 133.3 | 125.7 | 126.0 |
| :---: | :---: | :---: | :---: | :---: |
| 03-81 | \| Apparel | 124.7 | 125.2 | 125.2 |
| 04-4 | \| Other leather and related products | 141.2 | 141.1 | 141.2 |
| 05-3 | \| Gas fuels $2 /$ | 85.1 | 95.2 | 121.0 |
| 05-4 | \| Electric power | 137.4 | 128.6 | 128.0 |
| 05-7 | \| Refined petroleum products | 69.4 | 74.5 | 75.0 |
| 06-3 | \| Drugs and pharmaceuticals | 215.1 | 215.3 | 215.5 |
| 06-5 | \| Agricultural chemicals and products | 129.9 | 133.1 | 132.8 |
| 06-7 | \| Other chemicals and allied products | 132.3 | 132.8 | 132.5 |
| 07-1 | \| Rubber and rubber products | 116.5 | 116.1 | 116.1 |
| 07-11 | \| Rubber, except natural rubber | 121.3 | 121.1 | 121.5 |
| 07-13 | \| Miscellaneous rubber products | 136.6 | 136.9 | 136.9 |
| 07-2 | \| Plastic products | 131.1 | 130.7 | 130.4 |
| 08-1 | \| Lumber. | 184.4 | 190.7 | 189.6 |
| 09-1 | Pulp, paper, and products, excluding building paper and board. | 145.4 | 145.1 | 145.2 |
| 09-15 | \| Converted paper and paperboard products | 150.7 | 150.4 | 150.7 |
| 10-1 | \| Iron and steel | 126.2 | 124.6 | 124.2 |
| 10-2 | \| Nonferrous metals | 131.8 | 131.1 | 133.6 |
| 10-25 | \| Nonferrous mill shapes | 140.7 | 138.6 | 140.4 |
| 11-3 | \| Metalworking machinery and equipment | 143.4 | 143.7 | 144.1 |
| 11-4 | \| General purpose machinery and equipment | 142.7 | 143.2 | 143.4 |
| 11-6 | \| Special industry machinery. | 153.8 | 154.0 | 154.3 |
| 11-7 | \| Electrical machinery and equipment | 123.2 | 122.7 | 123.0 |
| 11-9 | \| Miscellaneous machinery and equipment | 129.5 | 129.9 | 129.9 |
| 12-6 | \| Other household durable goods. | 148.4 | 148.5 | 148.7 |
| 13-2 | \| Concrete ingredients. | 139.3 | 139.7 | 139.7 |
| 14-1 | \| Motor vehicles and equipment | 133.3 | 135.0 | 134.9 |
| 15-1 | \| Toys, sporting goods, small arms, etc | 130.7 | 131.0 | 130.7 |
| 15-4 | \| Photographic equipment and supplies. | 119.5 | 118.6 | 119.5 |
| 15-9 | \| Other miscellaneous products. | 132.9 | 132.9 | 132.7 |

1/ Data for Aug. 1996 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

2/ Prices of some items in this grouping are lagged 1 month



Technical Notes
Brief Explanation of
Producer Price Indexes
Producer price indexes (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. Most of the information used in calculating the indexes is obtained through the systematic sampling of nearly every industry in the manufacturing and mining sectors of the economy. The PPI program also includes some information from other sectors--agriculture, fishing, forestry, services, and gas and electricity. Because producer price indexes are designed to measure only the change in prices received for the output of domestic industries, imports are not included. The sample currently contains about 3,200 commodities and 80,000 quotations per month.

There are three primary systems of indexes within the PPI program: (1) Stage of processing indexes; (2) commodity indexes; and (3) indexes for the net output of industries and their products. The stage-of-processing structure (tables 1 and 2) organizes products by class of buyer and degree of processing. The commodity structure (tables 2 and 3) organizes products by similarity of end-use or material composition. The entire output of various industries is sampled to derive price indexes for the net output of industries and their products (table 4).

Within the stage-of-processing system, finished goods are commodities that will not undergo further processing and are ready for sale to the final demand user, either an individual consumer or business firm. Consumer foods include
unprocessed foods such as eggs and fresh vegetables, as well as processed foods such as bakery products and meats. Other finished consumer goods include durable goods such as automobiles, household furniture, and appliances, and nondurable goods such as apparel and home heating oil. Capital equipment includes producer durable goods such as heavy motor trucks, tractors, and machine tools.

The stage-of-processing category for intermediate materials, supplies, and components consists partly of commodities that have been processed but require further processing. Examples of such semifinished goods include flour, cotton yarn, steel mill products, and lumber. The intermediate goods category also encompasses nondurable, physically complete items purchased by business firms as inputs for their operations. Examples include diesel fuel, belts and belting, paper boxes, and fertilizers.

Crude materials for further processing are products entering the market for the first time that have not been manufactured or fabricated and that are not sold directly to consumers. Crude foodstuffs and feedstuffs include items such as grains and livestock. Examples of crude nonfood materials include raw cotton, crude petroleum, coal, hides and skins, and iron and steel scrap.

Producer price indexes for the net output of industries and their products are grouped according to the Standard Industrial Classification (SIC) and the Census product code extension of the SIC. Industry price indexes are compatible with other economic time series organized by SIC codes, such as data on employment, wages, and productivity. Table 4 lists indexes for the net output of major mining and manufacturing industry groups at the 2 -digit level.

Producer price indexes are based on selling prices reported by establishments of all sizes selected by probability sampling, with the probability of selection proportionate to size. Individual items and transaction terms from these firms are also chosen by probability proportionate to size. BLS strongly encourages cooperating companies to supply actual transaction prices at the time of shipment to minimize the use of list prices. Prices are normally reported by mail questionnaire for the Tuesday of the week containing the 13th.

Price data are provided on a voluntary and confidential basis; no one but sworn BLS employees are allowed access to individual company price reports. All producer price indexes are routinely subject to revision once, 4 months after
original publication, to reflect the availability of late reports and corrections by respondents.

Net output values of shipments are used as weights for industry indexes. Net output values refer to the value of shipments from establishments in one industry to establishments classified in another industry. However, weights for commodity price indexes are based on gross shipment values, including shipment values between establishments within the same industry. As a result, broad commodity grouping indexes such as the all commodities index are affected by the multiple counting of price change at successive stages of processing, which can lead to exaggerated or misleading signals about inflation. Stage-ofprocessing indexes partially correct this defect, but industry indexes consistently correct for this at all levels of aggregation. Therefore, industry and stage-of-processing indexes are more appropriate than broad commodity groupings for economic analysis of general price trends.

Weights for most traditional commodity groupings of the PPI, as well as all indexes (such as stage-of-processing indexes) calculated from traditional commodity groupings, currently reflect 1987 values of shipments as reported in the Census of Manufactures and other sources. From January 1987 through December 1991, PPI weights were derived from 1982 shipment values. Industry indexes shown in table 4 are also now calculated with 1987 net output weights.

Effective with publication of January 1988 data, many important PPI series (including stage-of-processing groupings and most commodity groups and individual items) were placed on a new reference base, 1982=100, to coincide with the reference year of the shipment weights. From 1971 through 1987, the standard reference base for most PPI series was 1967=100. Except for rounding differences, the shift to the new reference base did not alter any changes to previously published percent changes for affected PPI series. (See "Calculating Index Changes," below.) The new reference base is not used for indexes with a base later than December 1981, nor for indexes for the net output of industries and their products.

For further information on the underlying concepts and methodology of the Producer Price Index, see chapter 16, "Producer Prices," in BLS Handbook of Methods (September 1992), Bulletin 2414. Reprints are available from the Bureau of Labor Statistics on request.

Movements of price indexes from one month to another are usually expressed as percent changes rather than as changes in index points because index point chances are affected by the level of the index in relation to its base period, while percent changes are not. The box shows the computation of index point and percent changes.

Percent changes for $3-m o n t h$ and 6 -month periods can be expressed as annual rates that are computed according to the standard formula for compound growth rates. These data indicate what the percent change would be if the rate for a given 3 - or 6 -month span were maintained for a 12-month period.

## Index Point Change

| Finished Goods Price Index | 107.5 |
| :--- | ---: |
| Less previous index | 104.0 |
| Equals index point change | 3.5 |

Index Percent Change
Index point change 3.5
Divided by the previous index 104.0
Equals
0.034

Result multiplied by 1000.034 x 100
Equals percent change 3.4
Each index measures price changes from a reference period which equals 100.0 (1982 or some later month). An increase of 5.5 percent from the reference period in the Finished Goods Price Index, for example, is shown as 105.5. This change can also be expressed in dollars as follows: "Prices received by domestic producers of a systematic sample of finished goods have risen from $\$ 100$ in 1982 to sample
$\$ 105.50$ to-day." Likewise, a current index of 90.0 would indicate that prices received by producers of finished goods today are 10 percent lower than they were in 1982.

Seasonally Adjusted
and Unadjusted Data
Because price data are used for different purposes by
different groups, the Bureau of Labor Statistics publishes seasonally adjusted as well as unadjusted changes each month.

Seasonally adjusted data are preferred for analyzing general price trends in the economy because they eliminate the effect of changes that normally occur at about the same time and in about the same magnitude every year-such as price movements resulting from normal weather patterns, regular production and marketing cycles, model changeovers, seasonal discounts, and holidays. For these reasons, seasonally adjusted data more clearly reveal underlying cyclical trends.

Unadjusted data are of primary interest to users who need information which can be related to actual dollar values of transactions. Individuals requiring this information include marketing specialists, purchasing agents, budget and cost analysts, contract specialists, and commodity traders. It is the unadjusted data that are generally cited in escalating long-term contracts such as purchasing agreements or real estate leases. (See Escalation and Producer Price Indexes: A Guide for Contracting Parties, BLS Report 807, September 1991, available on request from BLS.)

For more information, see "Appendix A: Seasonal Adjustment Methodology at BLS," in the BLS Handbook of Methods (September 1992), Bulletin 2414.


[^0]:    1/ The indexes for August 1996 have been recalculated
    2/ Not seasonally adjusted.
    to incorporate late reports and corrections by respondents. 3/ Not available.

