



FOCUS on Prices and Spending



Producer Price Index: Third Quarter 2010

U.S. Bureau of Labor Statistics November 2010 Volume 1, Number 9

Current Price Topics

What Does the Producer Price Index Measure?

The **Producer Price Index (PPI)** measures average changes in prices received by domestic producers for the sale of their output. While this carefully worded definition reveals everything needed to answer the question, this report breaks down the official definition of the PPI to clear up common misconceptions about prices, production, and price pass-through within the of PPI.

Prices received

Except in the case of trade industry indexes, PPI defines “price” as the net revenue accruing to the producing establishment, from the buyer, for a specific product shipped or service provided, under specific transaction terms, on a specific day of the month. Wholesale and retail trade establishments are engaged in purchasing and reselling goods. Since little, if any, transformation of the goods takes place, trade industries are viewed as suppliers of services, for which the PPI seeks to measure the value their services add to the completed products. The PPI measures this added value as trade industries’ margin, where the margin is the amount the selling price exceeds the acquisition price of the goods.

Since the PPI generally measures the change in revenue received for shipped products and delivered services, it is an output index;

therefore, it will not necessarily reflect changes in the cost of materials, labor, equipment, or any other input cost associated with generating output except in the sense that producers consider these factors when they set their selling prices. Transportation costs are included only when the seller delivers the product without hiring a third-party shipper. In many cases, the price received by the manufacturer or service provider is the same as the selling price. However, excise taxes, which may be included in the price charged to the buyer, but collected on behalf of the government, are not considered part of the PPI price. Changes in sales promotions affect the PPI when they influence the proceeds ultimately realized by the manufacturer, such as in manufacturers’ rebate programs.

The PPI strives to capture price data for output shipped in the same month as that in which the transaction takes place. For the purpose of data collection, the day of the month for which PPI regularly requests price information is the Tuesday of the week containing the 13th of the month. Though some prices are those quoted on organized commodity exchanges or central markets, the vast majority of price quotations used to compose PPIs are reported to the Bureau of Labor Statistics (BLS) by a probability-based sample of producers.

Domestic production

The PPI tracks price changes for practically the entire output of the mining and manufacturing

sectors of the United States economy. As of January 2010, the PPI sample also tracked more than three quarters of the services sector in the United States, with efforts underway for further expansion. Coverage of the utility and construction sectors is limited.


Products in the PPI are organized using two main classification structures. The industry-based structure lists products and services by the industry in which each is a primary revenue source. Conversely, the commodity structure lists products and services by similarity of end use or material composition, regardless of the industry classification of the producing establishment. Ultimately, both structures draw from the same set of prices and contain indexes for all products and many services in the PPI survey.¹

The PPI only tracks prices for goods and services produced in the United States. Therefore, if a product or service is not manufactured or provided by a domestically located producer, a PPI for that good or service will not exist. Another reason for the unavailability of data for a given product is that the number of domestic-producing establishments may be too low. If an index for such a product were published, the identity of manufacturers in the sample could be discernable. Since prices for PPIs are considered proprietary information and are reported on a voluntary basis, great care is taken to protect the identity of survey respondents.

Input costs...output prices

Usually, changes in PPIs for material inputs to a particular product or service are more volatile and precede changes in the index

for the corresponding output, since sellers must manage buyer expectations about price. This pattern typically reflects what actually is occurring with prices charged to buyers from month to month, thereby making PPIs a useful price measurement tool for various research, policymaking, and business purposes.

More information on the PPI can be found in the **BLS Handbook of Methods, Chapter 14, Producer Price Indexes**. Further information is also available from the PPI Section of Index Analysis and Public Information, at ppi-info@bls.gov or (202) 691-7705. 



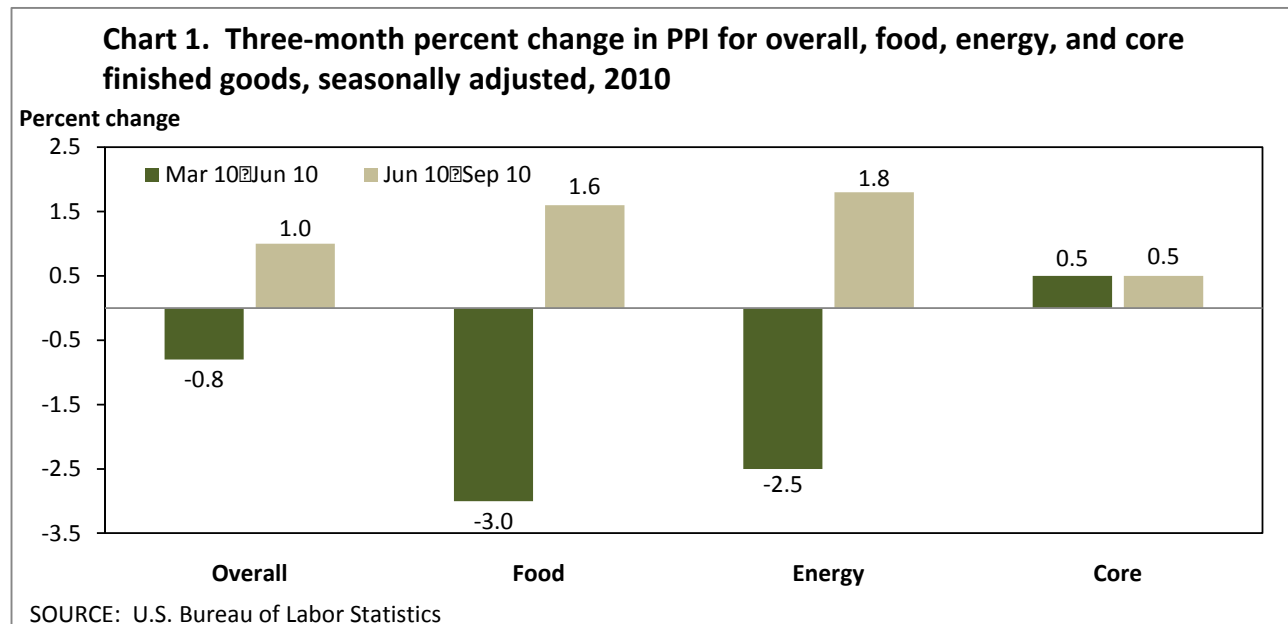
The PPI for Finished Goods increased 1.0 percent in the third quarter of 2010 after declining 0.8 percent in the second quarter. This upturn can be traced to rising prices for finished energy goods, which advanced 1.8 percent for the 3 months ended in September, following a 2.5-percent decrease in the prior quarter, and an increase in the finished consumer foods index, which moved up 1.6 percent after falling 3.0 percent for the 3-month period ended in June. For the third straight quarter, prices for finished goods other than foods and energy edged up 0.5 percent. (See chart 1.) At the earlier stages of processing, the intermediate goods index rose at a slightly faster rate for the 3 months

ended in September than it had in the preceding quarter, as an upturn in prices for energy goods and larger increases in prices for foods and feeds outweighed a downturn in the index for goods other than foods and energy. (See chart 2.) The crude goods index rose in the third quarter after declining in the 3-month period ended in June, led by a strong reversal in prices for crude foodstuffs and feedstuffs.² (See chart 3.)

In the energy sector, higher prices in the third quarter for refined petroleum products, after steep declines in the second quarter, led the shift in producer prices. After increasing to a level of over 10.1 million barrels per day by mid-June, crude petroleum imports fell to 9.0 million barrels per day by mid-September.³ Domestic field production of crude oil, at around 5.5 million barrels per day, as well as domestic production and imports of gasoline,

remained relatively steady over the same period.⁴

In the food sector, a weak forecast for the 2010 corn crop resulted in steep gains in corn prices. Total production for the 2010 growing season, compared with 2009, is expected to fall 3.4 percent to 12.7 billion bushels.⁵ In the United States, wheat and oilseed crop production is expected to be little changed compared with last year; however, worldwide wheat production is anticipated to decrease 1.6 percent in 2010.⁶ Similar to corn prices, the indexes for wheat and oilseeds climbed at steep rates in the third quarter after falling in the prior quarter. In response, prices for prepared animal feeds and for cereal and bakery products also turned up from June to September. Prices for slaughter livestock, as well as pork products and processed young chickens, have been affected by both higher feed prices and lower meat and poultry supplies.⁷



Finished goods

The PPI for Finished Goods increased 1.0 percent from June 2010 to September 2010 after declining 0.8 percent from March to June. This reversal can be traced—in nearly equal proportions—to upturns in prices for finished energy goods and finished consumer foods. Prices for finished goods other than foods and energy advanced at the same rate as in the prior quarter, 0.5 percent.

The index for finished energy goods moved up 1.8 percent for the 3 months ended in September, following a 2.5-percent decline from March to June. Leading this upturn were prices for gasoline, which climbed 3.1 percent after dropping 11.0 percent in the preceding 3-month period. Prices for home heating oil, diesel fuel, and liquefied petroleum gas also turned up in the third quarter. Residential electric power prices advanced more than they had from March to June. In contrast, the index for asphalt and other miscellaneous petroleum and coal products fell 6.1 percent from June to September, following a 55.0-percent jump in the second quarter.

The index for finished consumer foods climbed 1.6 percent in the third quarter, following a 3.0-percent decline in the second quarter. Leading this upturn, prices for fresh and dry vegetables rose 9.7 percent from June to September after falling 42.8 percent for the 3-month period ended in June. Prices for processed young chickens, cereal and bakery products, and canned carbonated soft drinks also turned up in the third quarter. The indexes for fresh fruits and melons and

eggs for fresh use decreased less than they had in the prior quarter. In contrast, the index for beef and veal moved down 0.9 percent for the 3 months ended in September, following a 14.8-percent jump from March to June. Prices for dry, condensed, and evaporated milk products and confectionery end products also turned down in the third quarter.

The index for finished goods less foods and energy moved up 0.5 percent for the 3 months ended in September, the same rate of increase as in the preceding 3-month period. In the third quarter, higher prices for motor vehicles, pharmaceutical preparations, alcoholic beverages, consumer plastics products, and civilian aircraft slightly outweighed lower prices for sanitary paper products; specialty cleaning, polishing, and sanitary products; non-wood commercial furniture and store fixtures; and electronic computers and computer equipment.

Intermediate goods

The PPI for Intermediate Materials, Supplies, and Components moved up 0.4 percent for the 3-month period ended September 2010 subsequent to a 0.2-percent advance for the 3 months ended in June. This faster rate of increase was led by an upturn in the intermediate energy goods index. Contributing to a lesser degree, intermediate foods and feeds prices rose more in the third quarter than they had in the second. In contrast, the index for intermediate goods less foods and energy inched down after advancing in the second quarter.

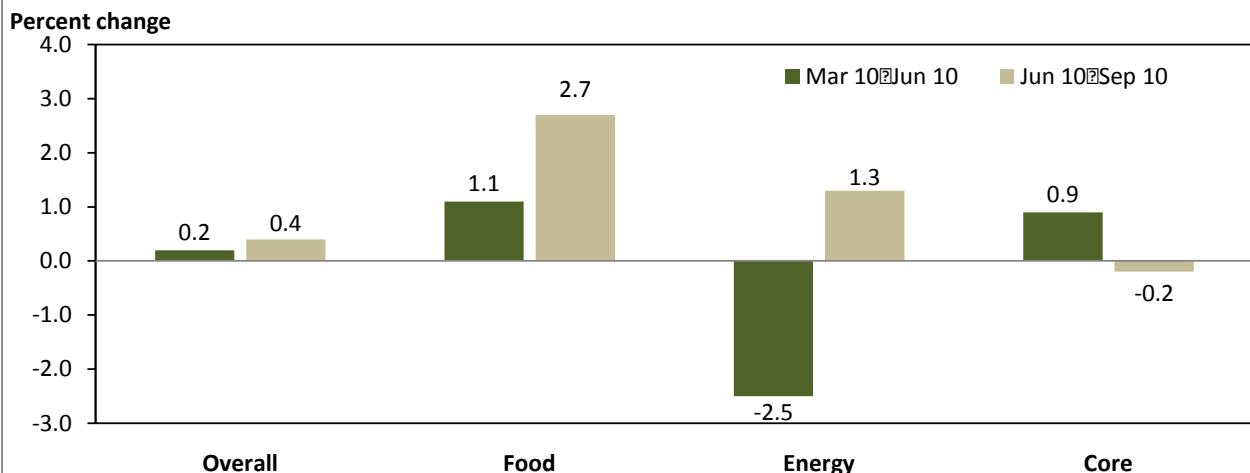
The index for intermediate energy goods increased 1.3 percent in the third quarter following a 2.5-percent decline in the second quarter. Diesel fuel prices rose 2.1 percent for the 3 months ended in September after falling 5.8 percent in the preceding quarter. Prices for gasoline, lubricating oil base stocks, and utility natural gas also turned up after decreasing from March to June. The index for electric power advanced at a faster rate for the 3 months ended in September than it had in the prior quarter. By contrast, the index for asphalt and other miscellaneous petroleum and coal products fell in the third quarter, following an increase in the second quarter.

The index for intermediate foods and feeds rose 2.7 percent for the 3 months ended in September after advancing 1.1 percent in the previous quarter. Leading this faster rate of increase, prices for prepared animal feeds

moved up 3.7 percent, following a 2.2-percent decline for the 3-month period ended in June. The indexes for processed young chickens and for cereal and bakery products also turned up in the third quarter. Prices for natural, processed, and imitation cheese and for bulk fluid milk and cream rose more than they had in the second quarter. In contrast, the index for beef and veal decreased 0.9 percent from June to September after surging 14.8 percent from March to June. Prices for frozen packaged fish and seafood and for dry, condensed, and evaporated milk products also turned down in the third quarter.

The index for intermediate goods less foods and energy edged down 0.2 percent for the 3 months ended in September after advancing 0.9 percent for the 3 months ended in June. Leading this downturn, prices for steel mill products fell 4.1 percent in the third

Chart 2. Three-month percent change in PPI for overall, food, energy, and core intermediate goods, seasonally adjusted, 2010



SOURCE: U.S. Bureau of Labor Statistics

quarter, following a 6.7-percent rise in the second quarter. The indexes for hardboard, fiberboard, and particleboard products; plastics products; plastic resins and materials; and lumber also declined after increasing in the prior quarter. Paperboard prices moved up less in the third quarter than they had in the preceding quarter. In contrast, the index for primary nonferrous metals climbed 9.3 percent from June to September after dropping 8.6 percent from March to June. Prices for copper and brass mill shapes and for basic inorganic chemicals also turned up in the third quarter.

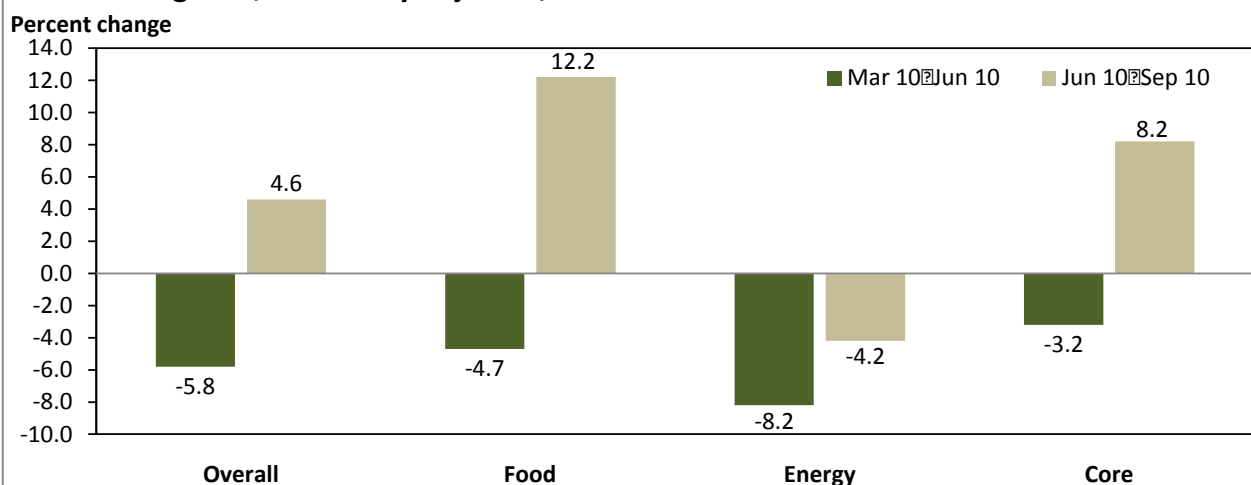
Crude goods

The PPI for Crude Materials for Further Processing moved up 4.6 percent from June to September, following a 5.8-percent decrease from March to June. Accounting for about 60 percent of this upturn, prices for crude

foodstuffs and feedstuffs climbed after falling in the second quarter. Also contributing to the overall upturn, but to lesser degrees, the index for crude nonfood materials less energy also rose in the third quarter following a fall in the prior quarter, while the rate of decline in prices for crude energy materials slowed for the 3 months ended in September, compared with the second quarter.

The index for crude foodstuffs and feedstuffs rose 12.2 percent from June to September, following a 4.7-percent decrease for the 3 months ended in June. Roughly one-third of this upturn can be attributed to corn prices, which surged 60.6 percent after declining 8.0 percent in the preceding quarter. The indexes for oilseeds, fresh and dry vegetables, wheat, and fluid milk also turned up in the third quarter. Prices for slaughter livestock increased more than they had in

Chart 3. Three-month percent change in PPI for overall, food, energy, and core crude goods, seasonally adjusted, 2010



SOURCE: U.S. Bureau of Labor Statistics

the 3 months ended in June. In contrast, the tree nuts index was unchanged from June to September after advancing 11.8-percent in the previous 3-month period. Slaughter turkey prices rose less than they had in the second quarter.

The index for crude nonfood materials less energy moved up 8.2 percent for the 3 months ended in September following a 3.2-percent decline in the preceding quarter. About 25 percent of this upturn can be traced to prices for nonferrous scrap, which climbed 13.8 percent in the third quarter after falling 9.4 percent from March to June. The indexes for grains, copper ores, wastepaper, and iron and steel scrap also rose after falling in the second quarter. By contrast, price increases for gold ores slowed to 3.7 percent from June to September from 8.1 percent in the prior 3-month period. The hides and skins index moved down after advancing in the prior quarter.

The index for crude energy materials fell 4.2 percent from June to September, following an 8.2-percent decline for the 3 months ended in June. Most of this slower rate of decrease is attributable to prices for crude petroleum, which edged down 0.5 percent, following a 7.1-percent drop in the second quarter. The natural gas index also declined less, moving down 11.4 percent in the third quarter after falling 13.1 percent in the prior quarter. In contrast, coal prices advanced 2.0 percent for the 3 months ended in September, following a 2.5-percent rise in the previous quarter.

Trade industries

The PPI for the Net Output of Total Trade Industries increased 1.6 percent in the third quarter of 2010 after declining 1.2 percent in the second quarter. (Trade indexes measure changes in margins received by wholesalers and retailers.) Leading this reversal, margins received by durable goods wholesalers rose 4.0 percent, following a 4.1-percent drop from March to June. The margin indexes for family clothing stores, discount department stores, and supermarkets also turned up for the 3 months ended in September after decreasing in the prior 3-month period. Margins received by gasoline stations with convenience stores and warehouse clubs and supercenters advanced more than they had in the previous quarter. In contrast, margins received by pharmacies and drug stores fell 11.9 percent in the third quarter, compared with a 0.3-percent decline for the 3 months ended in June. The margin indexes for gasoline stations without convenience stores and home centers turned down after rising in the second quarter.

Transportation and warehousing industries

The PPI for the Net Output of Transportation and Warehousing Industries declined 1.1 percent for the 3 months ended in September after advancing 0.9 percent in the preceding 3-month period. Leading this downturn, prices received by the scheduled air transportation industry group fell 5.0 percent, following a 1.0-percent increase in the second quarter. Similarly, the indexes for couriers, truck transportation, rail transportation, and for general warehousing

and storage also decreased in the third quarter after rising in the 3 months ended in June. In contrast, prices received by the Coastal and Great Lakes freight transportation industry climbed 6.6 percent from June to September, compared with a 0.7-percent decline from March to June. In the third quarter, the rate of advance in the index for inland water freight transportation accelerated, while prices received by the nonscheduled air transportation industry turned up.

Traditional service industries

The PPI for the Net Output of Total Traditional Service Industries increased 0.7 percent

for the 3 months ended in September, following a similar rise of 1.0 percent in the second quarter. During the third quarter, higher prices received by the depository credit intermediation industry group; the security and commodity contracts intermediation and brokerage industry group; direct life, health, and medical insurance carriers; and hospitals outweighed lower prices received by portfolio managers, periodical publishers, television broadcasters, and by direct property and casualty insurers.



Notes

¹ “PPI Industry or Commodity Data: Which Better Suits Your Needs?” *Focus on Prices and Spending: Producer Price Indexes, Volume 1, Number 7*, on the Internet at http://www.bls.gov/opub/focus/volume1_number7/ppi_1_7.htm.

² Price movements for PPIs described in this text include preliminary data for the months of June 2010 through September 2010. All PPI data are recalculated 4 months after original publication to reflect late data received by survey respondents. Seasonally adjusted PPIs are recalculated, on an annual basis, for 5 years, to reflect more recent seasonal patterns.

³ Energy Information Administration, on the Internet at <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=WCEIMUS2&f=W> (visited Oct. 14, 2010).

⁴ Energy Information Administration, on the Internet at <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=WCRFPUS2&f=W> and http://www.eia.gov/oog/info/twip/twip_gasoline.html#production (visited Oct. 14, 2010).

⁵ “*Feed Outlook, A Report from the Economic Research Service*,” FDS-10j, Oct. 13, 2010, United States Department of Agriculture, on the Internet at <http://usda.mannlib.cornell.edu/usda/ers/FDS//2010s/2010/FDS-10-13-2010.pdf> (visited Oct. 13, 2010).

⁶ “*Wheat Outlook, A Report from the Economic Research Service*,” WHS-10j, Oct. 13, 2010, United States Department of Agriculture, on the Internet at <http://usda.mannlib.cornell.edu/usda/ers/WHS//2010s/2010/WHS-10-13-2010.pdf> (visited Oct. 13, 2010). Also, see “*Oil Crops Outlook, A Report from the Economic Research Service*,” OCS-10j, October 12, 2010, United States Department of Agriculture, on the Internet at <http://usda.mannlib.cornell.edu/usda/ers/OCS//2010s/2010/OCS-10-12-2010.pdf> (visited Oct. 13, 2010).

⁷ “*Livestock, Dairy, and Poultry Outlook, A Report from the Economic Research Service*,” LPD-M-195, Sept. 17, 2010, United States Department of Agriculture, on the Internet at <http://www.ers.usda.gov/publications/ldp/2010/09Sep/ldpm195.pdf> (visited Oct. 13, 2010). Also, see Whitney McFerron and Elizabeth Campbell, “*Corn Crunch Means Costliest Beef in Quarter Century*,” *Businessweek.com*, Oct. 11, 2010, on the Internet at <http://www.businessweek.com/news/2010-10-11/corn-crunch-means-costliest-beef-in-quarter-century.html> (visited Oct. 18, 2010).