



Focus on Prices and Spending



Producer Price Index: First Quarter 2011

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Current Price Topics

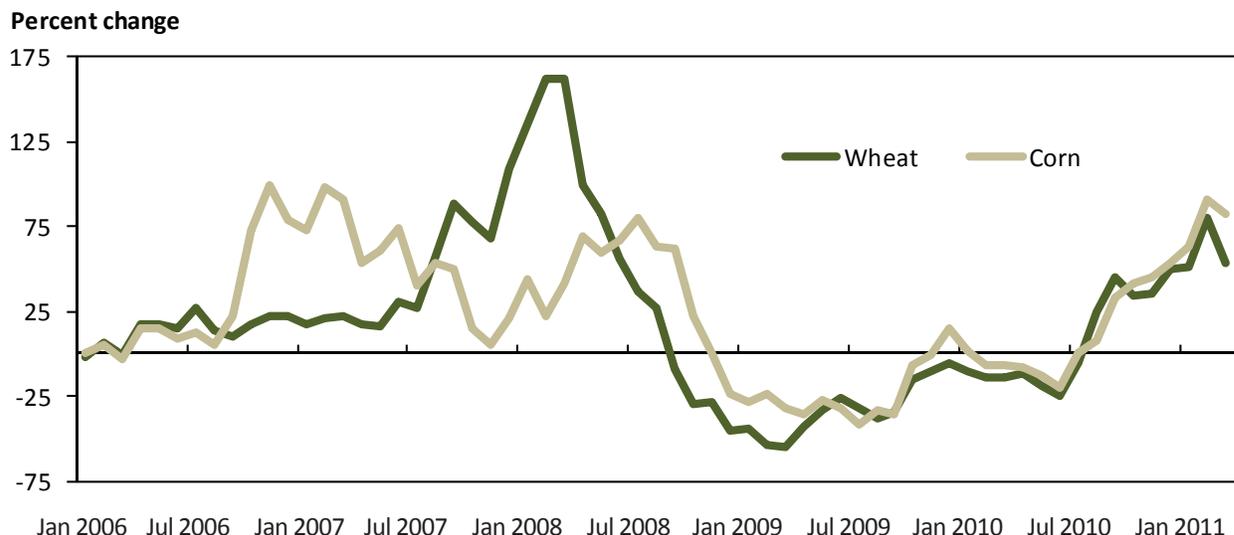
Grain Prices and Our Grocery Bill

History has a way of repeating itself. This is true when it comes to agricultural price changes, which are typically passed on to consumers. During the end of 2010 and into early 2011, we have seen grain prices reach historical highs. This is important to consumers, because grain products are the basic ingredients in many of the products we buy at our local grocery stores. So does this mean that the average person will have to spend more money on food?

The Producer Price Index (PPI) saw grain prices rise considerably—69.9 percent from July

2007 to July 2008, and this high price level was sustained through the remainder of 2008. This inflation was due to multiple factors. For example, with gasoline prices reaching record highs, there was renewed interest in ethanol (made from corn) as an alternative fuel source. The potential gains from ethanol production brought speculators into the corn market in historic numbers. This introduced a great deal of new market demand, resulting in the price of corn increasing 80.4 percent from July 2007 to July 2008. As corn prices reached historical highs, wheat prices followed a similar pattern, increasing 36.9 percent during the same period. The large jump in wheat prices was the result of poor weather conditions in 2006 and 2007 that lowered stockpiles 14.0 percent.¹ Corn and wheat prices remained at

Chart 1. Twelve-month percent change in PPI for wheat and corn, not seasonally adjusted



SOURCE: U.S. Bureau of Labor Statistics

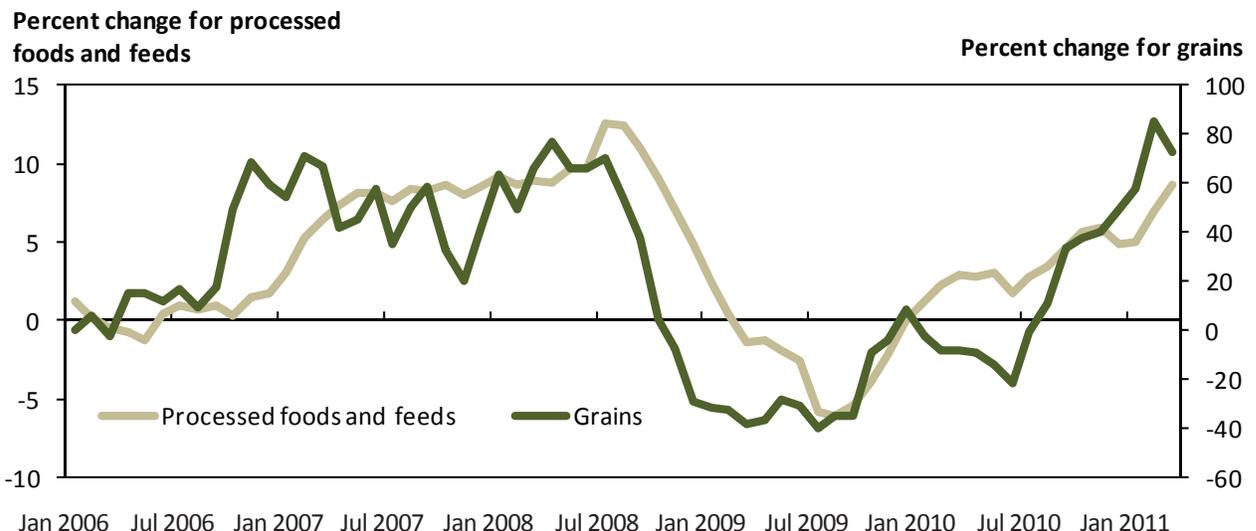
high levels until being overcome by the 2008 global economic collapse. Corn and wheat price declines continued until the middle of 2010, when the price of grains again increased dramatically, due to increased demand and speculation over poor foreign crop yields.² In February 2011, as the global economy continued to recover, grain prices reached levels similar to those seen in 2007 and 2008. (See chart 1.)

By March 2011, global grain prices, led by surging wheat and corn prices, were up 73.0 percent from previous-year levels. Contributing to this run-up in prices, global wheat inventories were at low levels going into 2011, due to poor weather conditions in Russia, the EU, Canada, and Australia.³ This global short supply situation caused worldwide demand for wheat to shift to U.S. supplies, resulting in a domestic price increase of 53.8 percent from March 2010 to

March 2011. During this time, corn prices also rose, because of high demand for ethanol and speculation of a poor South American corn crop.⁴ The combination of lower corn inventories and high demand resulted in an 82.5-percent price increase from March 2010 to March 2011.

Ingredients derived from grains are used in a variety of products, such as bread, pasta, baked goods, and other staples regularly purchased by consumers. Grains are also an important input for the production of animal feeds, which in turn influence the price of beef, pork, and chicken. Though grain prices were rising in both 2007–2008 and 2010–2011, those price increases were not immediately or fully passed through to the PPI for processed foods and feeds. (See chart 2.) From March 2010 to March 2011, prices for processed foods and feeds increased 8.7 percent—the largest 12-month advance since

Chart 2. Twelve-month percent change in PPI for grains and for processed foods and feeds, not seasonally adjusted



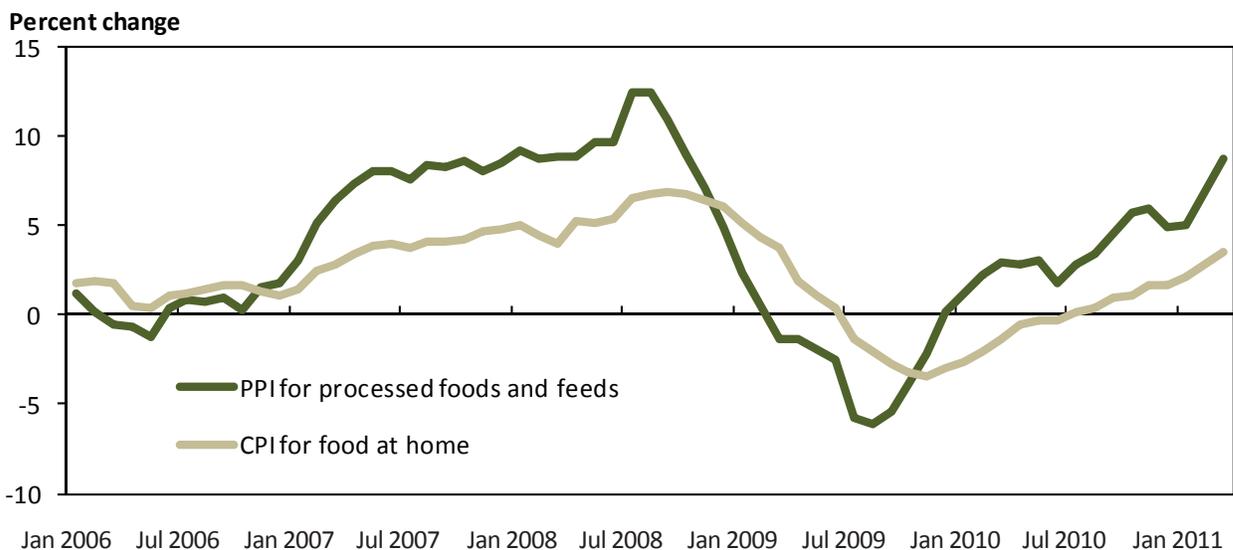
SOURCE: U.S. Bureau of Labor Statistics

a 9.0-percent rise in October 2008. In 2008, when the increase in grain prices worked its way through the economy and eventually affected prices for processed foods and feeds, inflation for processed foods and feeds peaked at 12.5 percent in July of that year. But as the economic recession took its toll and the economy contracted, grain prices fell. Prices for processed foods and feeds followed suit, dropping 6.1 percent from August 2008 to August 2009. By January 2010, processed foods and feeds prices had rebounded to register a 1.2-percent year-over-year increase, as the economy recovered and worldwide demand for grains became more robust. The processed foods and feeds recovery continued through March 2011, resulting in a 12-month change of 8.7 percent.

Knowing how high grain prices have affected consumer food prices in the past, analysts view

the recent trend as an indication that higher grocery prices are at hand. Although grain prices tend to be more volatile than prices for processed foods and feeds and for consumer foods, since grain prices only represent about 12 cents of every dollar of food purchased⁵ the price trends tend to be similar. A comparison of the PPI for processed foods and feeds and Consumer Price Index (CPI) food at home demonstrates how changes in the processed foods and feeds index usually have an impact on the amount consumers pay for food at home 3 to 4 months later. (See chart 3.) As mentioned, from March 2010 to March 2011, grain prices are up 73.0 percent; and processed foods and feeds prices are up 8.7 percent. Looking back to 2008, it took about 5 to 6 months for the increase in the price of grains to fully show up on our tables at home. The most recent surge in grain prices began in August 2010, with processed food

Chart 3. Twelve-month percent change for PPI processed foods and feeds and for CPI food at home, not seasonally adjusted



SOURCE: U.S. Bureau of Labor Statistics

prices first showing the effects in September 2010, and consumer food prices beginning to rise in January 2011. Should we prepare for additional higher food costs in the next 3 to 5 months? We cannot say for sure, but history has shown that trends in grain prices eventually have an impact on consumer food prices.

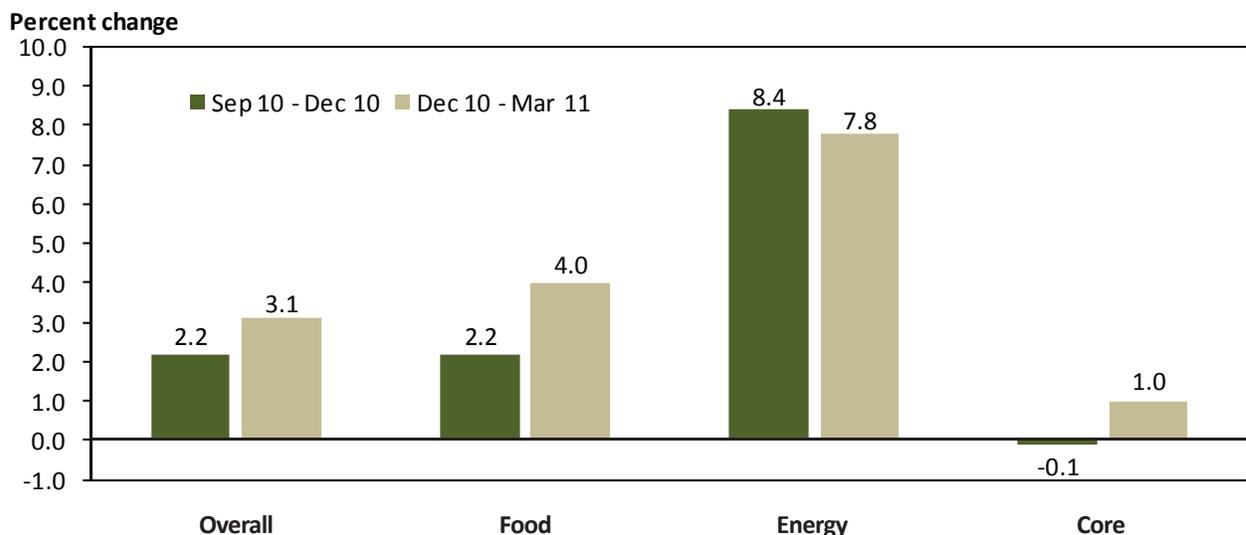
Current Price Trends First Quarter 2011 Producer Inflation Trends Higher

The PPI for finished goods increased 3.1 percent in the first quarter of 2011, compared with a 2.2-percent advance in the fourth quarter of 2010. Leading this acceleration, prices for goods other than foods and energy moved up 1.0 percent from December 2010 to March 2011, after inching down 0.1 percent in the prior

quarter.⁶ Within the finished core,⁷ a first-quarter upturn in motor vehicle prices led reversals in the indexes for both capital equipment and consumer durable goods. (Industrial production of motor vehicles and parts fell 3.8 percent in the fourth quarter of 2010 and rose 8.9 percent in the first 2 months of 2011.)⁸ In addition, the index for finished consumer foods climbed 4.0 percent in the first quarter of 2011, following a 2.2-percent rise for the 3 months ended in December. This faster rate of increase can be traced to prices for processed consumer foods, such as meats and dairy products. In contrast, the index for finished energy goods increased at a slightly slower rate in the first quarter of 2011 than it had in the preceding quarter—7.8 percent and 8.4 percent—respectively. (See chart 4.)

The index for intermediate goods rose 4.7 percent in the first quarter, after moving up 3.2

Chart 4. **Three-month percent change in PPI for overall, food, energy, and core finished goods, seasonally adjusted**



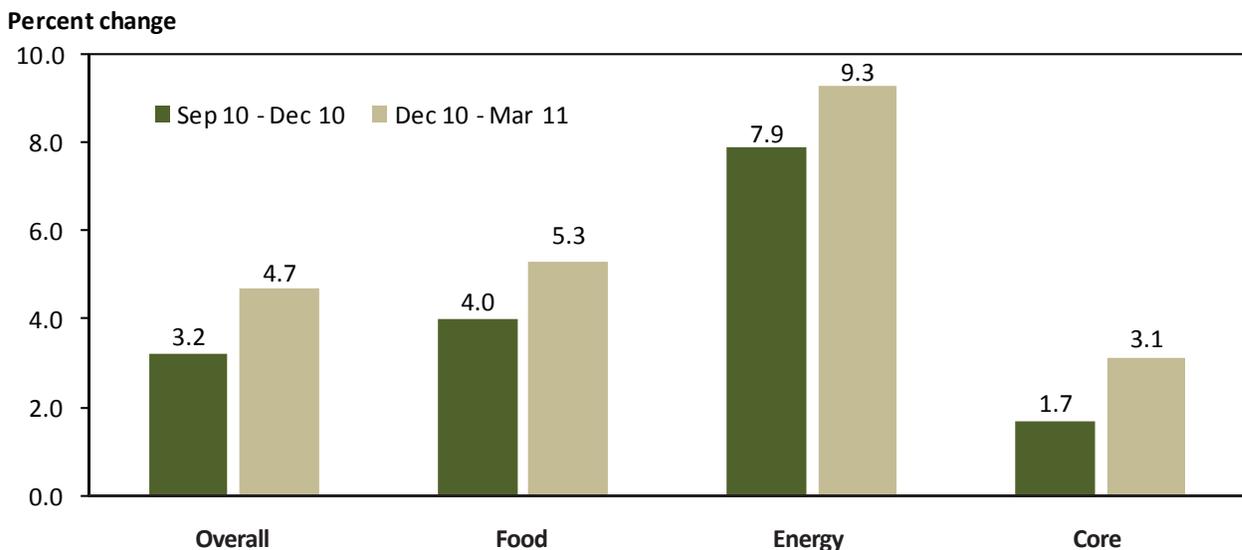
SOURCE: U.S. Bureau of Labor Statistics

percent from September to December. About two-thirds of this faster rate of advance can be attributed to prices for intermediate goods other than foods and energy, which climbed 3.1 percent in the first quarter of 2011, after increasing 1.7 percent in the fourth quarter of 2010. Pronounced quickening in inflation for both durable and nondurable materials for manufacturing, combined with moderate acceleration in prices for components for manufacturing and business supplies, drove the faster rate of increase. The index for intermediate energy goods rose at a slightly faster rate than in the prior quarter—9.3 percent compared with 7.9 percent. Over the last 2 calendar quarters, continued gains in prices for crude petroleum and basic industrial materials have contributed to index gains for intermediate core and intermediate energy goods. Worldwide, market expectations for improved economic growth

have resulted in advancing material input prices.⁹ Surging prices for dairy products and meats were responsible for the first quarter 2011 acceleration in the index for intermediate foods and feeds. (See chart 5.)

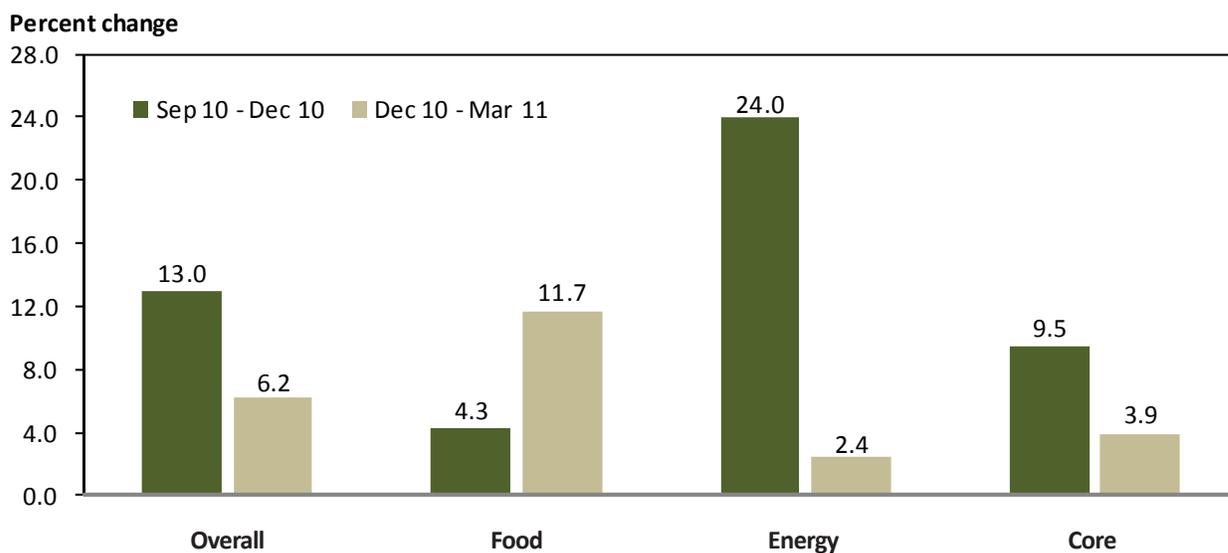
Unlike index movements for finished and intermediate goods, price increases for crude materials for further processing moderated to 6.2 percent for the 3 months ended in March, compared with a 13.0-percent jump the previous quarter. Smaller advances in the indexes for energy materials and crude nonfood materials less energy outweighed faster gains in prices for foodstuffs and feedstuffs. A significant portion of the deceleration in crude goods prices can be linked to the index for crude petroleum. Crude oil prices surged 42.8 percent in the final quarter of 2010 and rose at a much slower, 6.2-percent rate in the first quarter of 2011. (See chart 6.)

Chart 5. Three-month percent change in PPI for overall, food, energy, and core intermediate goods, seasonally adjusted



SOURCE: U.S. Bureau of Labor Statistics

Chart 6. **Three-month percent change in PPI for overall, food, energy, and core crude goods, seasonally adjusted**



SOURCE: U.S. Bureau of Labor Statistics

Finished goods

The Producer Price Index for finished goods advanced 3.1 percent in the first quarter of 2011, after moving up 2.2 percent from September to December. Accounting for over three-quarters of this acceleration, prices for finished goods less foods and energy turned up 1.0 percent from December to March subsequent to a 0.1-percent decline in the prior quarter. Also contributing to the faster rate of increase in finished goods prices, the index for finished consumer foods advanced 4.0 percent for the 3-month period ended in March, following a 2.2-percent gain from September to December. By contrast, price increases for finished energy materials slowed to 7.8 percent in the first quarter of 2011, from 8.4 percent for the previous 3-month period.

From December to March, the index for finished goods less foods and energy turned up 1.0 percent, compared with a 0.1-percent decline in the last quarter of 2010. Prices for light motor trucks rose 0.8 percent for the 3-month period ended in March following a 3.1-percent decrease in the preceding quarter. Similarly, the indexes for passenger cars, nonwood commercial furniture, sporting and athletic goods, and sanitary paper products also turned up in the first quarter of 2011. Prices for consumer plastic products advanced at a faster rate, compared with the 3-month period ended in December. By contrast, the index for cigarettes was unchanged from December to March, after increasing 3.0 percent from September to December. Prices for aircraft and aircraft

equipment turned down in the 3-month period ended in March.

The index for finished consumer foods climbed 4.0 percent from December to March, following a 2.2-percent rise in the fourth quarter of 2010. About two-thirds of this acceleration was due to rising prices for fresh and dry vegetables, which jumped 32.9 percent subsequent to advancing 8.7 percent in the 3-month period ended in December. The indexes for soft drinks and for sugar and confectionary products also increased at faster rates, compared with the prior quarter. Prices for dairy products and for beef and veal turned up in the first quarter of 2011. Conversely, the index for fresh fruits and melons fell 21.0 percent in the 3-month period ending in March, following a 33.4-percent jump from September to December. Prices for eggs for fresh use and head rice also turned down in the first quarter of 2011.

The index for finished energy goods moved up 7.8 percent in the first quarter of 2011. Finished energy increases were broad-based with higher prices for gasoline, home heating oil, liquefied petroleum gas, diesel fuel, residential electric power, kerosene, finished lubricants, and jet fuel.

Intermediate goods

The Producer Price Index for intermediate materials, supplies, and components rose 4.7 percent for the 3-month period ended March 2011, subsequent to a 3.2-percent increase for the 3 months ended in December 2010. This acceleration was led by prices for intermediate goods less foods and energy,

which advanced 3.1 percent in the first quarter of 2011, following a 1.7-percent rise in the prior 3-month period. Similarly, the indexes for intermediate energy goods and for intermediate foods and feeds increased more from December to March than they had in the fourth quarter of 2010.

Prices for intermediate goods less foods and energy moved up 3.1 percent in the first quarter of 2011, compared with a 1.7-percent rise from September to December 2010. Leading this faster rate of advance, the index for steel mill products jumped 12.4 percent, after a 0.5-percent rise in the prior 3-month period. Prices for industrial chemicals, yarns, fabricated structural metal products, and for plastic resins and materials also increased more than in the previous quarter. By contrast, the index for metal cans and components turned down 7.7 percent from December to March, after rising 8.7 percent for the 3 months ended December 2010. Prices for nonferrous mill shapes and for nonferrous wire and cable advanced less than they had a quarter earlier.

Intermediate energy goods prices rose 9.3 percent for the 3 months ending in March following a 7.9-percent advance in the previous 3-month period. The index for jet fuel accounted for most of this acceleration, surging 31.6 percent in the first quarter of 2011, after rising 13.7 percent in the preceding 3-month period. Diesel fuel prices also advanced more from December to March than they had from September to December. The indexes for asphalt, utility natural gas,

and electric power turned up after declining in the fourth quarter of 2010. By contrast, prices for liquefied petroleum gas rose less in the first quarter than they had in the prior 3 months, moving up 8.1 percent, subsequent to a 29.6-percent jump. The indexes for lubricating oil base stocks and residual fuels also increased less than in the fourth quarter of 2010.

The index for intermediate foods and feeds moved up 5.3 percent for the 3 months ending in March, compared with a 4.0-percent advance in the previous 3-month period. The index for dairy products turned up 8.4 percent in the first quarter after falling 2.5 percent from September to December. Prices for beef and veal also rose after decreasing in the fourth quarter. The indexes for sugar and confectionery products and for shortening and cooking oil rose more in the first quarter than they had from September to December. Conversely, the formula feeds index increased 3.7 percent, compared with a 19.5-percent jump in the prior 3 months. Prices for soybean cake, meal, and other byproducts and for flour and flour base mixes and doughs also rose less than in the fourth quarter. The index for head rice turned down from December to March, after advancing in the prior 3-month period.

Crude goods

The Producer Price Index for crude materials for further processing increased 6.2 percent in the 3 months ended March 2011, following a 13.0-percent advance from September to December 2010. Leading the deceleration in crude goods prices, the rise in the crude

energy index slowed to 2.4 percent from a 24.0-percent jump in the 3-month period ending in December 2010. The index for crude nonfood materials less energy also moved up less, advancing 3.9 percent from December to March, after climbing 9.5 percent in the previous quarter. By contrast, the rise in the index for crude foodstuffs and feedstuffs accelerated to 11.7 percent during the first quarter of 2011, from 4.3 percent in the final quarter of 2010.

The index for crude energy materials rose 2.4 percent from December 2010 to March 2011, compared with a 24.0-percent climb for the 3 months ended December 2010. Crude petroleum prices moved up 6.2 percent in the first quarter, following a 42.8-percent jump in the preceding quarter. The natural gas index turned down 4.7 percent, after rising 8.6 percent between September and December 2010. Conversely, prices for coal advanced 2.8 percent in the first quarter of 2011, following a 1.6-percent increase in the fourth quarter of 2010.

The index for crude nonfood materials less energy moved up 3.9 percent from December 2010 to March 2011, subsequent to a 9.5-percent advance in the previous quarter. About two-thirds of this deceleration can be attributed to corrugated wastepaper prices, which declined 29.1 percent in the first quarter, following a 69.9-percent surge in the 3 months ended December 2010. The indexes for plant and animal fibers and for stainless and other alloy steel scrap also turned down, after rising in the fourth quarter of 2010. Prices for nonferrous metal ores,

grains, and copper base scrap advanced less in the first quarter of 2011 than they had from September to December. By contrast, price increases for carbon steel scrap accelerated to 13.6 percent in the first quarter of 2011, from 5.8 percent in the previous quarter. The index for high grade wastepaper turned up for the 3 months ended March 2011, after declining in the previous 3 months.

The advance in the crude foodstuffs and feedstuffs index accelerated to 11.7 percent for the 3 months ended March 2011, from 4.3 percent for the 3 months ended December 2010. This faster rate of advance was led by slaughter livestock prices, which turned up 17.8 percent in the first quarter, following a 1.9-percent decline in the fourth quarter. Similarly, the indexes for fluid milk and slaughter poultry also increased in the first quarter of 2011, after declining from September to December. Prices for fresh vegetables, except potatoes advanced more than in the last quarter of 2010. Conversely, the grains index rose 3.1 percent in the 3-month period ended in March, following a 20.3-percent gain from September to December. Prices for oilseeds also advanced less in the first quarter of 2011 than they had in the preceding quarter. The indexes for fresh fruits and melons and Irish potatoes for processing turned down in the 3-month period ending in March, after rising in the final quarter of 2010.

Trade industries

The PPI for the net output of total trade industries increased 1.9 percent in the first quarter of 2011, following a 0.2-percent

decline in the fourth quarter of 2010.

(Trade indexes measure changes in margins received by wholesalers and retailers.)

Almost half of this upturn can be traced to margins received by merchant wholesalers of nondurable goods, which advanced 2.3 percent from December to March, after falling 2.4 percent in the prior quarter. Margin indexes for supermarkets and other grocery stores, warehouse clubs and supercenters, gasoline stations, non-discount department stores, and new car dealers also moved up, following decreases in the preceding quarter. Conversely, margins received by discount department stores dropped 7.2 percent in the first quarter of 2011, after rising 16.4 percent from September to December 2010. The margin index for women's clothing stores also turned down in the first quarter.

Transportation and warehousing industries

The PPI for transportation and warehousing industries increased 4.8 percent in the first quarter of 2011, after moving up 1.2 percent in the previous quarter. Over 40 percent of this acceleration is attributable to prices received by the scheduled air transportation industry group, which climbed 11.3 percent, following a 2.7-percent rise in the fourth quarter of 2010. The industry indexes for the trucking sector, couriers, and line-haul railroads also advanced more from December to March than they had in the prior quarter. Conversely, the index for pipeline transportation of crude oil fell 8.2 percent in the first quarter of 2011, after edging down 0.1 percent from September to December.

Prices received by the industries for nonscheduled air freight chartering, general warehousing and storage, and marine cargo handling turned down, after increasing in the preceding quarter.

Traditional service industries

The PPI for the net output of total traditional service industries increased 0.5 percent from December to March, following a 0.3-percent advance from September to December. Leading this acceleration, prices received by insurance carriers rose 1.1 percent, after inching up 0.1 percent in the previous quarter. The index for offices of lawyers climbed in the first quarter following no change in the fourth

quarter. Prices received by the industries for accommodation, commercial machinery repair and maintenance, and automotive equipment rental and leasing turned up after falling in the prior quarter. In contrast, the index for the commercial banking industry declined 3.4 percent in the first quarter, following no change in the fourth quarter. Prices received by general medical and surgical hospitals rose less in the first quarter, and the index for wired telecommunications carriers turned down, after rising in the fourth quarter.

Additional information is available from the **PPI Section of Index Analysis and Public Information**, at ppi-info@bls.gov or at (202) 691-7705. 

Notes

¹ National Agricultural Statistics Service (NASS), Agricultural Statistics Board, U.S. Department of Agriculture. *Grain Stocks Report*. January 11, 2008: <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1079>.

² *Feedstuffs: The Weekly Newspaper for Agribusiness*. "Holidays bring volatile trading." Fatka, Jacqui. Issue 53, Volume 82. December 27, 2010: <http://www.feedstuffs.com>.

³ Foreign Agricultural Service, U.S. Department of Agriculture. *Grain: World Markets and Trade*. February 2011: <http://usda.mannlib.cornell.edu/usda/fas/grain-market//2010s/2011/grain-market-02-09-2011.pdf>.

⁴ Foreign Agricultural Service, U.S. Department of Agriculture. *Grain: World Markets and Trade*. February 2011: <http://usda.mannlib.cornell.edu/usda/fas/grain-market//2010s/2011/grain-market-02-09-2011.pdf>.

⁵ Economic Research Service, U.S. Department of Agriculture. *A Revised and Expanded Food Dollar Series A Better Understanding of Our Food Costs*. February 2011: http://www.ers.usda.gov/Publications/ERR114/ERR114_ReportSummary.pdf.

⁶ Price movements for PPIs described in this text include preliminary data for the months of December 2010 through March 2011. All PPI data are recalculated 4 months after original publication, to reflect late data received from survey respondents. In addition, seasonally adjusted PPIs are recalculated, on an annual basis, for 5 years, to reflect more recent seasonal patterns.

⁷ Within the PPI stage-of-processing structure, indexes for goods other than foods and energy commonly are referred to as the core indexes.

⁸ *Industrial Production and Capacity Utilization*, G.17 (419), March 17, 2011, Board of Governors of the Federal Reserve System, table 5, available on the Internet at <http://www.federalreserve.gov/releases/g17/20110317/> (visited April 14, 2011).

⁹ "Global Economic Prospects, Navigating Strong Currents," volume 2, January 2011, (pp. 1-4), The World Bank, available on the Internet at <http://siteresources.worldbank.org/INTGEP/Resources/335315-1294842452675/GEPJanuary2011FullReport.pdf> (visited Apr. 14, 2011).