AIER | Inflation Report, March 2013
featuring the Everyday Price Index
AMERICAN INSTITUTE *for* ECONOMIC RESEARCH • www.aier.org • March 11, 2013

Pressure Builds Beneath Prices

Productivity growth is slowing. Commodity costs are on the rise. But for now, at least, inflation appears tame.

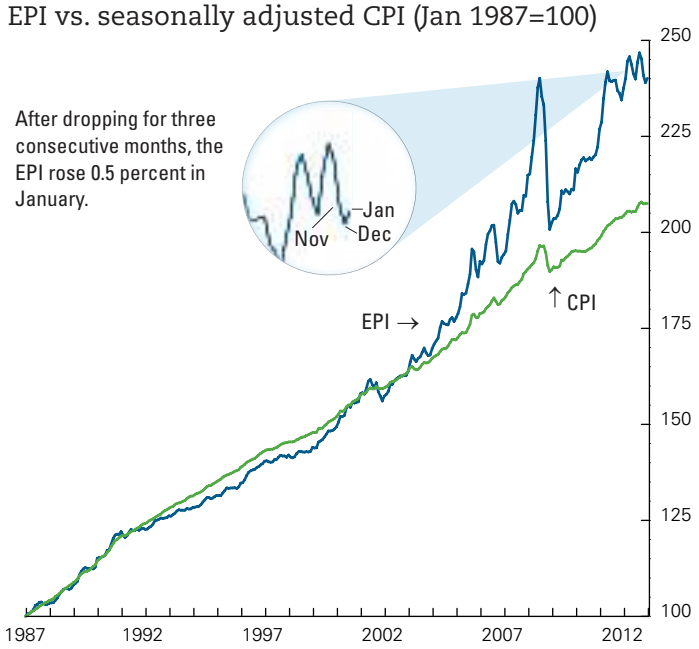
by Julie Ni Zhu, Research Analyst

On paper, price inflation for the first month of 2013 seems like nothing to write home about. The Consumer Price Index (CPI), a broad measure of the prices of goods and services, remained unchanged. Meanwhile, AIER's proprietary Everyday Price Index (EPI), which draws from CPI data but includes only frequently purchased items like groceries and gasoline, posted a slight increase. It rose 0.5 percent in January after falling for the three previous months. (See Charts 1 and 2.)

But annualized, January's EPI increase comes to 6 percent. A closer look at the EPI and other key price indices suggests that underlying inflationary pressures may be building.

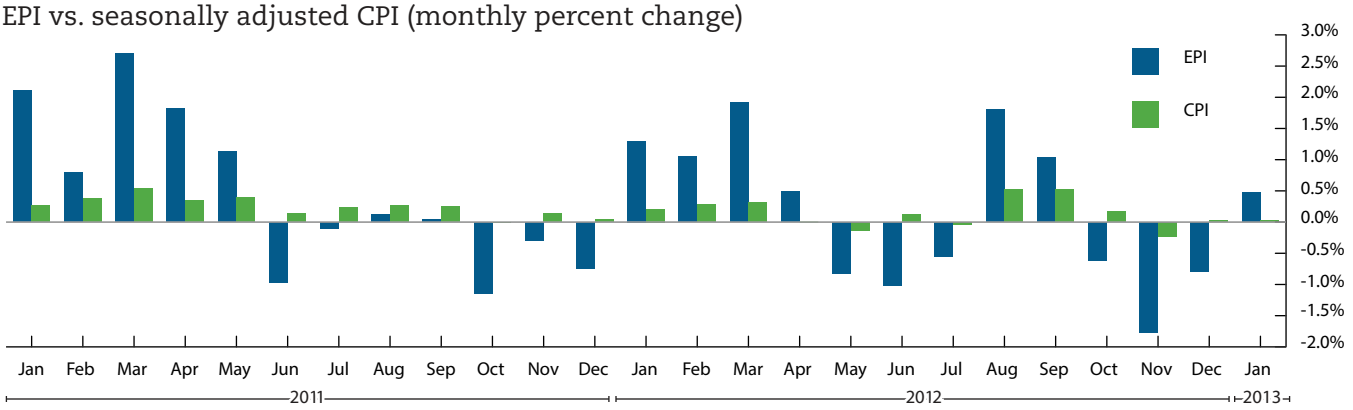
The two biggest categories driving last month's EPI increase were prescription drugs and child care expenses. Prices for prescription drugs climbed 0.6 percent in January and 1.6 percent

Chart 1: **Prices Over the Long Term**
EPI vs. seasonally adjusted CPI (Jan 1987=100)



The EPI is a proprietary index of AIER. The CPI is produced by the Bureau of Labor Statistics.

Chart 2: **The Inflation We Feel vs. the Inflation Reported**
EPI vs. seasonally adjusted CPI (monthly percent change)



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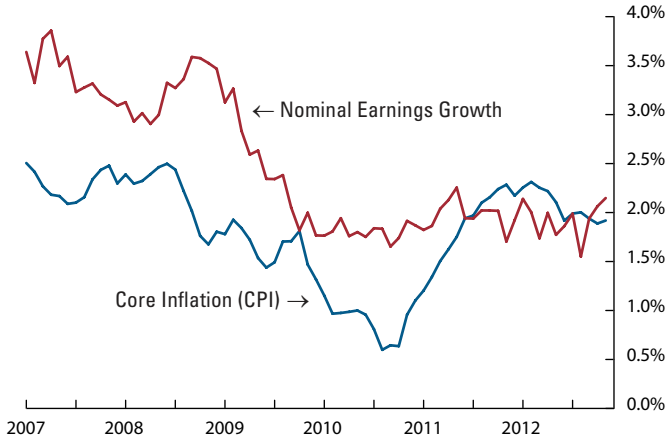
year-to-year. Child care and nursery school fees also rose 0.6 percent for the month and increased 2.8 percent year-to-year.

These categories alone do not take up enough of day-to-day expenses to explain the EPI's 0.5 percent increase. Nor were food and gas, two large chunks of daily budgets that often fluctuate, responsible for the January jump. Rather, as the table below shows, prices of frequently purchased goods and services increased across the board.

How Daily Prices Stack Up
(changes in the nine components of the EPI)

	January 2013	
EPI	**Monthly Change %**	**12-month Change %**
Food and beverages	0.41 ▲	1.57 ▲
Motor fuel and transportation	-0.03 ▼	-0.25 ▼
Household fuel, utilities, and supplies	0.67 ▲	0.82 ▲
Recreation services (incl. cable TV)	0.54 ▲	2.55 ▲
Communication (incl. telephone and internet)	0.50 ▲	0.54 ▲
Prescription drugs	0.61 ▲	1.61 ▲
Personal care products and services	0.07 ▲	1.09 ▲
Tobacco and smoking products	0.54 ▲	1.95 ▲
Child care and nursery school fees	0.56 ▲	2.81 ▲

Chart 3: **Inflation Outpaces Earnings**
(year-to-year percent change)



Source: Bureau of Labor Statistics, calculated by author.

This suggests broader inflationary pressures are at work. (For a closer look at how prices of individual goods and services changed last year, see page 6.)

The core CPI, which excludes food and energy, rose 0.3 percent last month—the largest monthly change since August. (See Chart 3.) Over 12 months, that would amount to a 3.6 percent annualized increase. This is a significant change from recent trends. Core CPI has seen year-to-year growth of about 2 percent since September 2008.

There is reason to believe that consumers will soon face climbing prices for gas and food as well, deepening concern about future inflation.

As of this writing, regular gas costs an average of $3.83 a gallon, compared to $3.55 in December. The spike is not reflected in this EPI because prices are reported with a lag. Next month, the fuel category is very likely to reflect the prices people are now experiencing at the pump.

Some of the rise in gas prices is the result of short-term changes. Several refineries shut down this winter for standard maintenance and for unscheduled updates. This reduced the amount of gas available to suppliers, driving up prices. Meanwhile, the prices of futures contracts for certain gasoline products increased. This was in preparation for the inevitable price spike as refineries performed maintenance and began shifting production to the more expensive summer gasoline blend.

The low gasoline prices of November and December now appear to have been an anomaly. Over-production and falling demand caused prices at the pump to plummet. At one point in the fourth quarter, the price of a barrel of gasoline was less than the price of a barrel of crude oil—driving refineries to shut down.

Since then, the price of gasoline has recovered substantially, and many refineries are coming back on line. While gas prices are likely to continue to rise, the rate of increase should be slower as we return to longer-term price trends.

This year, consumers can also expect higher food and beverage prices—and these goods make up 38 percent of Americans' daily expenses. The CPI

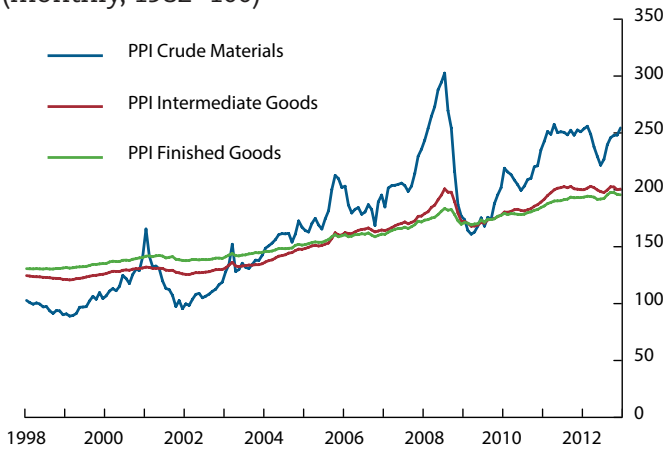
Food Index registered no change to food prices in January. But according to the U.S. Department of Agriculture's Economic Research Service (ERS), the drought of 2012 has affected prices for corn, soybeans, and other field crops. Since higher grain prices make feeding livestock more expensive, the price of meat is also likely to rise. This will ultimately drive up a broad array of retail food prices.

Given the usual lags for the price of feed to move through the chain of production, the ERS predicts that food prices will increase 3 to 4 percent in 2013, with much of the inflation occurring in the first half of the year.

PPI Shows Inflationary Pressures

The Producer Price Indices (PPI), which monitor wholesale prices for crude materials, intermediate goods, and finished goods, are another important place to look for potential inflationary pressures. Increases in wholesale prices lead to price changes at the retail level by a process called cost-push inflation. When goods and services cost more to produce, sellers are motivated to charge more for their products. This is not automatic. Sellers are less likely to raise prices if demand is weak, since doing so will likely reduce sales. And when imported goods are cheaper, raising domestic prices just drives buyers to foreign-produced goods.

Chart 4: **Raw Materials Take Off**
(monthly, 1982=100)



Source: Bureau of Labor Statistics.

The good news is that wholesale prices have not yet shown evidence of a broad inflationary shift, according to the PPI. Core PPI prices, which exclude food and energy, grew 0.2 percent in January, or 2.4 percent annualized. Overall, core PPI has grown at an annual rate of around 2 percent since May 2011.

But the rising cost of crude materials like logs and cotton may change that. Crude materials are the most sensitive of wholesale prices to inflationary pressures. Because world demand for raw materials and energy went up after the recession ended in June 2009, the prices of crude materials have risen much faster than the prices of intermediate and finished goods. (See Chart 4.)

About the EPI

AIER's Everyday Price Index (EPI) measures the changing prices of frequently purchased items like food and utilities. We do this by selecting the prices of goods and services from the thousands collected monthly by the Bureau of Labor Statistics in computing its Consumer Price Index. The EPI basket contains only prices of goods and services that Americans typically buy at least once a month, excluding contractually fixed purchases such as mortgages. Our staff economists weight each EPI category in proportion to its share of Americans' average monthly expenditures. In order to better reflect the out-of-pocket prices that consumers experience on a daily basis, the EPI does not seasonally adjust prices.

To learn more about our methodology, view the weights assigned to each component, and browse past EPI updates, visit AIER's EPI Methodology page at www.aier.org/epi-methodology.

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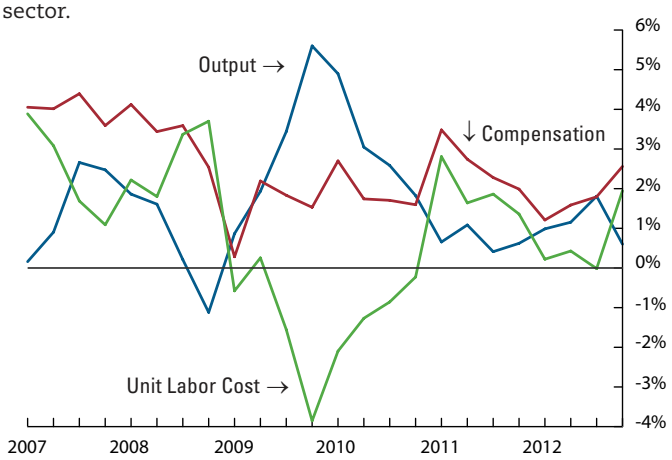
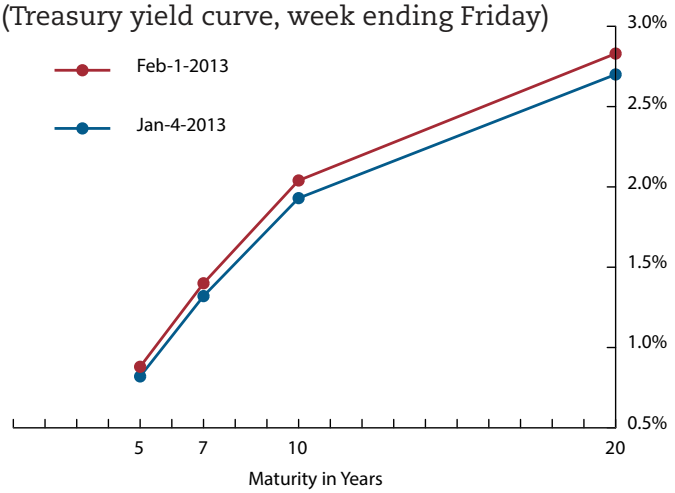
Chart 5: **Labor Costs on the Rise**
(year-to-year percent change)

The series represented are U.S. output per hour, U.S. unit labor costs, and U.S. compensation per hour in the nonfarm business sector.



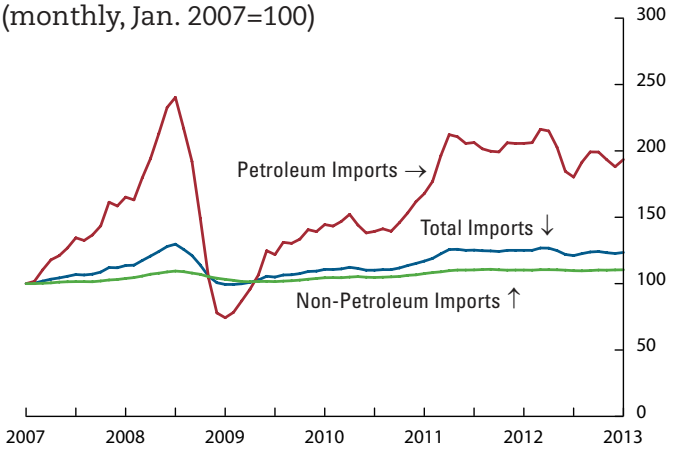
Source: Bureau of Labor Statistics, Bloomberg, calculated by the author.

Chart 6: **Investors Perceive Inflation Risk**
(Treasury yield curve, week ending Friday)



Source: U.S. Department of Treasury.

Chart 7: **Non-Petroleum Imports Restrain Prices**
(monthly, Jan. 2007=100)



Source: Bureau of Labor Statistics, calculated by the author.

In fact, the price of crude materials has increased at a rate that is nearly 20 percent higher than that of intermediate and finished goods, barring a brief dip around May 2012.

If prices for crude materials continue to rise, producers' prices for intermediate and finished goods will increase too. Eventually, the higher producer prices will work their way into higher retail prices.

The relationship between labor costs and productivity growth holds another potential sign for inflation. (See Chart 5.) As long as productivity increases at a rate that is in line with increases in wages, benefits, and other labor costs, firms can absorb higher labor costs without having to raise prices very much. But if labor costs increase faster than productivity, consumers usually wind up seeing a markup at the checkout counter.

Right now, total labor costs are rising slowly but surely. The Employment Cost Index (ECI) has shown a 2 percent year-to-year change since the start of the recovery.

Year-over-year data suggests productivity growth has recently slowed. Growth in output per hour has been slowing since the last quarter of 2009. Meanwhile, compensation growth has been outpacing output growth since the first quarter of 2011. Growth in unit labor costs was higher than output for five out of eight quarters during that same period. Unless productivity starts picking up, higher prices could lie ahead.

With these signs emerging, it is not surprising that some investors are concerned about inflation. The Treasury yield curve, which shows the relationship between maturities and interest rates, offers a visual of that anxiety. (See Chart 6.) When nominal interest rates increase, it means that investors are demanding higher interest rates for their bonds in order to compensate for expected inflation. In early February, yields at every maturity were higher than a month before.

However, several factors may offset possible price hikes for food, gas, and other retail goods.

First, lower costs of imported goods may help keep domestic prices in check. As shown in Chart 7, the price of U.S. imports has grown very slowly since 2007. Most of the price increases that have occurred were driven by petroleum. Hikes in the price of non-petroleum imports have been remarkably low—likely the result of the worldwide economic slowdown.

Another corrective to rising inflation is the relatively low rate of GDP growth, which currently stands at 1.9 percent. This is below the potential U.S. GDP growth rate of roughly 2.5 percent, indicating that the economy is not operating at peak capacity. (See AIER's February Business-Cycle Conditions, "Back to Normal.") But as the recovery continues, parts of the economy may start heating up. The indices in AIER's *Inflation Report* will help us know if we are going to get burned.

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CPI Changes in 2012

The CPI rose 1.7 percent between December 2011 and December 2012, with significant upswings in medical care expenses and mild increases in other prices. Price changes for specific categories of goods and services are shown below.

Percent Change in Selected Consumer Price Indexes
December 2011 – December 2012

Expenditure Category	*Percent Change*
All Items	**1.7**
Food and Beverages (15% of expenditures)	**1.8**
Food	1.8
Food at Home	1.3
Bread	1.5
Cookies	1.8
Meats	0.8
Beef and Veal	4.6
Pork	-3.3
Bacon, breakfast sausage, and related products	-2.4
Pork Chops	-3.7
Poultry	5.7
Fish and Seafood	-0.1
Eggs	1.1
Milk	1.9
Cheese and related products	0.1
Ice cream and related products	-0.3
Fresh fruits and vegetables	2.3
Apples	13.3
Bananas	0.0
Citrus fruits	3.2
Potatoes	-7.4
Lettuce	-3.2
Tomatoes	4.8
Canned fruits and vegetables	0.5
Frozen vegetables	-2.2
Candy and chewing gum	1.5
Butter	-2.6
Salad dressing	0.2
Peanut butter	13.8
Nonalcoholic beverages	-0.2
Juices and nonalcoholic drinks	0.7
Coffee	-4.3
Soups	0.4
Food away from home	2.5
Full service meals and snacks	2.4
Limited service meals and snacks	2.6
Alcoholic beverages at home	1.1
Beer and ale	1.6
Wine	0.8
Distilled spirits	0.2
Housing (41% of expenditures)	**1.7**
Shelter	2.2
Rent of primary residence	2.7
Owners' equivalent rent of primary residence	2.1
Hotels and motels	-0.2
Fuels and utilities	0.4
Fuel oil	3.6
Electricity	-0.5
Utility (piped) gas service	-2.9
Propane, kerosene, and firewood	-11.7
Water and sewerage maintenance	6.7
Garbage and trash collection	2.9
Household furnishings and operations	0.0
Floor coverings	-3.8
Window coverings	1.1
Bedroom furniture	-2.9
Living room, kitchen, and dining room furniture	0.1
Major appliances	3.9
Clocks, lamps, and decorator items	-3.7
Dishes and flatware	-3.5
Tools, hardware and supplies	1.0
Outdoor equipment and supplies	-0.1
Housekeeping supplies	0.4
Household operations	2.2
Domestic services	1.7
Repair of household items	4.3
Apparel (4% of expenditures)	**1.8**
Men's apparel	1.2
Suits, coats, and jackets	-0.2
Shirts and sweaters	-1.0
Pants and shorts	2.5
Boys' apparel	6.1
Women's apparel	1.1
Outerwear	3.1
Dresses	2.2
Suits and separates	1.9
Girls' apparel	0.3
Infants' and toddlers' apparel	1.4
Watches	4.6
Jewelry	-2.9
Footwear	4.4
Transportation (17% of expenditures)	**1.6**
New cars	1.1
New trucks	2.1
Used cars and trucks	-2.0
Car and truck rental	0.9
Gasoline	1.7
Motor vehicle maintenance and repair	1.3
Tires	0.2
Motor vehicle insurance	4.7
Motor vehicle fees	2.2
Public transportation	2.4
Airline fare	2.1
Ship fare	-3.1
Public transportation within city	3.8
Medical care (7% of expenditures)	**3.2**
Medical care commodities	1.7
Prescription drugs	1.9
Nonprescription drugs	0.7
Medical equipment and supplies	1.9
Medical care services	3.7
Physicians' services	2.0
Dental services	2.8
Eye glasses and eye care	0.3
Inpatient hospital services	4.2
Outpatient hospital services	5.5
Nursing homes and adult daycare	3.6
Recreation (6% of expenditures)	**0.8**
Video and audio	0.3
Televisions	-17.5
Cable and satellite tv/radio service	3.6
Video discs and other media	-6.4
Rental of video or audio discs	-0.5
Audio equipment	-6.3
Pet food	2.9
Veterinarian services	2.4
Sporting goods	1.0
Photographic equipment & supplies	-7.6
Toys	-5.9
Sewing machines, fabric and supplies	3.0
Music instruments and accessories	0.8
Recreation services	2.6
Club dues and fees for sports and exercise	0.4
Admissions	4.2
Fees for lessons or instructions	3.4
Newpapers and magazines	6.2
Recreational books	-2.1
Education and communication (7% of expenditures)	**1.5**
Education	3.8
Educational books and supplies	7.0
College tuition and fees	4.0
Elementary and high school tuition and fees	3.5
Child care and nursery school	2.7
Communication	-0.6
Postage and delivery services	3.8
Telephone services	0.3
Wireless telephone services	-0.8
Personal computers and peripheral equipment	-8.7
Computer software and accessories	-7.2
Other goods and services (3% of expenditures)	**1.5**
Tobacco and smoking products	1.9
Personal care	1.4
Cosmetics and related products	-0.1
Haircuts and other personal care services	1.8
Legal services	1.9
Financial services, incl. tax returns	2.6
Funeral expenses	2.2