

Economics Group

Special Commentary

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Inflation Chartbook: August 2013

Price Pressures Have Edged Up, Better Positioning the Fed for an Eventual QE Exit

Against the backdrop of sluggish domestic and global demand, moderating inflation has become a growing concern for the financial markets and the Fed. Recently, however, consumer and producer prices have picked up modestly. The gain has in large part been driven by higher energy prices. With this increase, concerns over disinflation and even deflation have subsided somewhat, but remain elevated as inflation continues to run historically low.

Higher energy prices provided the spark needed to stop moderating headline inflation.

So, where do we stand now? Is the Fed truly in a position to slow monthly security purchases when inflation is persistently running below its 2 percent objective? We expect given the pace of job gains over the past year and the outlook for better growth in the United States and for the global economy over the next few quarters, inflation will move higher over the forecast horizon. Therefore, we believe the Fed remains on track to begin scaling back asset purchases as early as September.

At the start of the second quarter, the Fed's preferred measure of consumer inflation, the headline personal consumption expenditures (PCE) deflator, fell to a three-and-a-half year low of 0.9 percent year over year. Weakness was broad based as prices for durable and nondurable goods were recording substantial declines and service prices were rising at half the monthly pace seen in the first quarter. Sparked by unrest in the Middle East and consumer expectations that the economy was indeed improving, oil prices began to trend higher over the quarter, providing upward pressure on wholesale and consumer energy prices. As a result, the headline PCE deflator stopped decelerating in the middle of the second quarter and has begun to firm on a year-over-year basis.

Figure 1

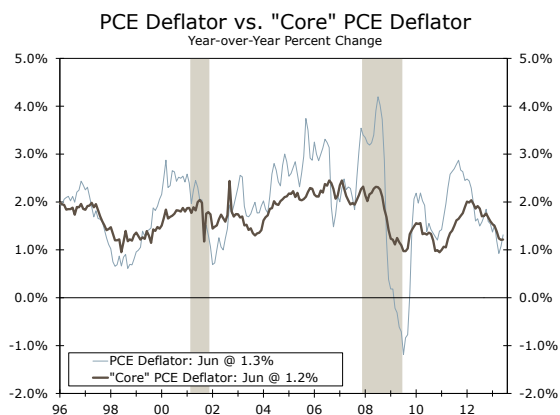
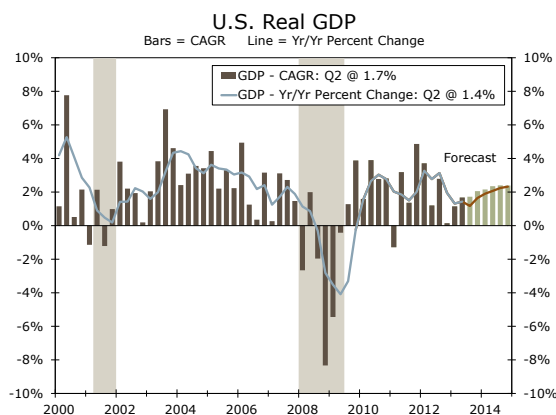


Figure 2



Source: U.S. Department of Commerce and Wells Fargo Securities, LLC



Prospects for growth and inflation lie to the upside.

The recent upturn in prices, which has also occurred at the producer stage, should be a welcome development to Fed officials who have become more openly concerned about the economic risks associated with persistently low rates of inflation. Throughout this year's meetings, FOMC policy statements have consistently noted that inflation was running "well below" the committee's longer-run objective of 2 percent due in part to these transitory energy influences. The July FOMC policy statement reiterated that same message, but also reinforced the Fed's expectation that inflation would move back toward its longer-run objective over the medium term.

As we look at the outlook, we agree with the Fed that prospects for growth and inflation lie to the upside. Job growth, while lackluster in July, has been steady with employers adding around 200,000 jobs per month over the past six months. While job growth is still far from being strong enough to soak up the excess slack in the labor market, the pace of wage growth has ticked up. Over the second quarter, the year-over-year pace of private-sector wages and salaries rose to 1.9 percent from 1.7 percent in the first quarter—its first increase since March 2012. Based on expectations that demand will rise at a stronger pace in the second half of the year, most Fed participants project headline and core inflation will move higher over the near term, but in a measured manner. While the central tendency of Fed projections for the headline PCE deflator moved down to 0.8–1.2 percent in 2013, it picked up to 1.4–2.0 percent for 2014 on support from stable inflation expectations and diminishing resource slack.

Our own outlook for inflation has a similar trajectory over the forecast horizon. Based on better domestic demand, moderate job growth and improving—albeit slowly—global conditions, we expect headline consumer inflation to pick up over the next 18 months on a year-over-year basis. Certainly, excess capacity and labor market slack will continue to weigh on the pace of inflation and keep it from becoming problematic, but we see the better outlook placing upward pressure on prices.

Assuming the FOMC's convictions on the growth and inflation outlook remain solid, we believe the committee is still in a position to contemplate scaling back the current pace of asset purchases. We will receive two more months of inflation data—July and August—before the next FOMC meeting on Sept. 17-18. Unless these measures come in significantly lower than anticipated, we do not expect concerns over low inflation to prevent the Fed from taking the first step toward normalizing policy in September.

Figure 3

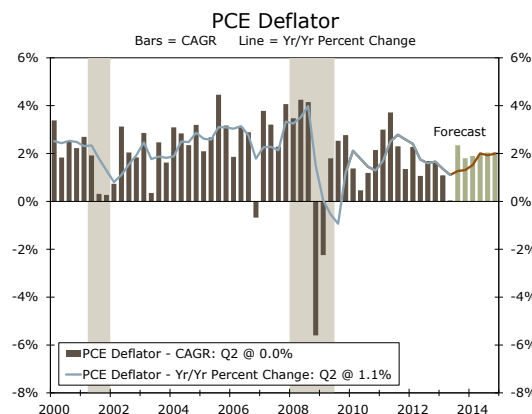
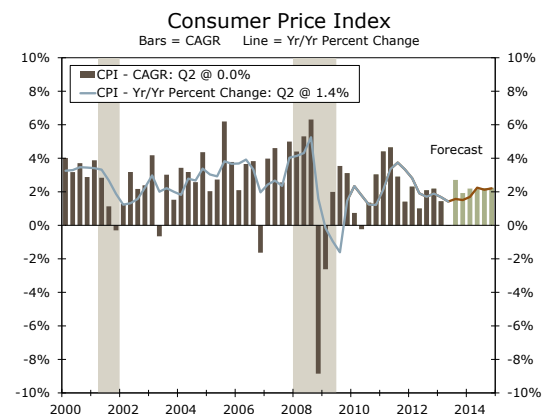


Figure 4



Source: U.S. Department of Commerce, U.S. Department of Labor and Wells Fargo Securities, LLC

National Economic & Inflation Outlook

	Actual				Forecast								Actual				Forecast			
	2012				2013								2011				2012			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	2011	2012	2013	2014	2011	2012	2013	2014
Real GDP (a)	3.7	1.2	2.8	0.1	1.1	1.7	1.7	2.1	2.2	2.1	2.3	2.4	1.8	2.8			1.8	2.8	1.4	2.1
Nonfarm Payroll Change (b)	262.3	108.0	152.0	208.7	207.3	187.7	180.7	200.0	200.0	200.0	200.0	210.0	175.3	182.8			175.3	182.8	193.9	202.5
Unemployment Rate	8.3	8.2	8.0	7.8	7.7	7.6	7.5	7.3	7.2	7.2	7.2	7.1	8.9	8.1			8.9	8.1	7.5	7.1
Capacity Utilization Rate	77.6	77.7	77.4	77.5	78.0	77.8	79.2	79.6	79.7	79.8	79.8	80.0	76.5	77.6			76.5	77.6	78.7	79.9
Consumer Price Index (c)	2.8	1.9	1.7	1.9	1.7	1.4	1.6	1.5	1.7	2.2	2.1	2.2	3.1	2.1			3.1	2.1	1.5	2.1
Core CPI	2.2	2.3	2.0	1.9	1.9	1.7	1.8	1.9	1.8	2.0	2.1	2.1	1.7	2.1			1.7	2.1	1.8	2.0
PCE Deflator (c)	2.4	1.7	1.6	1.7	1.4	1.1	1.3	1.3	1.5	2.0	1.9	2.0	2.4	1.8			2.4	1.8	1.3	1.9
Core PCE	2.0	1.9	1.8	1.7	1.5	1.2	1.3	1.3	1.3	1.5	1.6	1.7	1.4	1.8			1.4	1.8	1.0	1.5
Employment Cost Index (c)	1.9	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.2	2.2	2.2	2.3	2.0	1.9			2.0	1.9	1.9	2.2
Producer Price Index (c)	3.4	1.1	1.5	1.7	1.5	1.6	1.5	1.6	2.1	3.1	2.7	2.7	6.0	1.9			6.0	1.9	1.6	2.6
Core PPI	3.0	2.7	2.5	2.1	1.7	1.7	1.4	1.6	1.6	1.7	1.8	1.9	2.4	2.6			2.4	2.6	1.3	2.2
Import Price Index (c)	5.2	-0.8	-1.9	-1.1	-1.4	-1.5	0.2	0.1	0.3	1.9	2.6	2.9	10.9	0.3			10.9	0.3	-0.6	1.8
Export Price Index	1.8	-0.5	-0.9	1.2	1.0	-0.3	-0.2	-0.1	0.1	2.0	2.8	3.2	8.1	0.4			8.1	0.4	0.2	1.9
Crude Oil (Brent) (d)	118.2	108.5	109.0	109.6	112.2	103.3	103.7	103.0	105.0	107.0	109.0	111.0	110.6	111.3			110.6	111.3	105.5	108.0
Interest Rates (e)																				
Federal Funds Target Rate	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25			0.25	0.25	0.25	0.25
10-Year Treasury Note	2.23	1.67	1.65	1.78	1.87	2.52	2.60	2.70	2.90	3.00	3.20	3.40	2.78	1.80			2.78	1.80	2.42	3.13

Forecast as of August 7, 2013

(a) Compound Annual Growth Rate (d) Quarterly Average of Daily Close

(b) Average Monthly Change (e) Quarter Figures are End of Period; Annual Figures are Period Averages

(c) Year-over-Year Percent Change

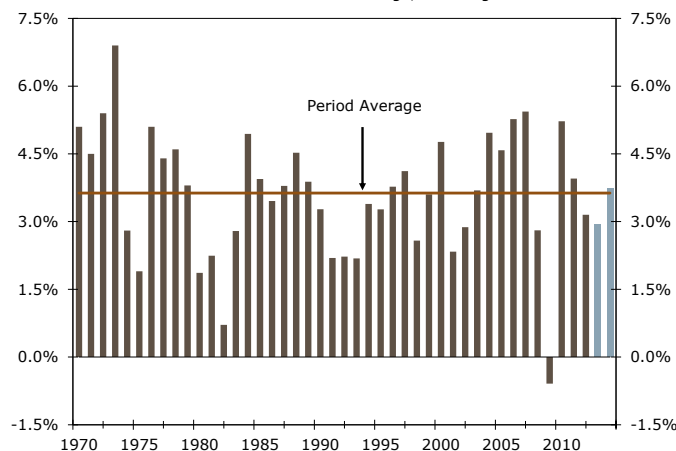
Source: U.S. Department of Commerce, U.S. Department of Labor, Bloomberg LP, Federal Reserve Board and Wells Fargo Securities, LLC

Demand and Slack in the Economy

- Data on employment over the past few months have indicated further improvement in the labor market, although conditions remain tenuous compared to prior cycles. Employers added an average of 188,000 jobs per month in the second quarter, but gains slowed in July. The unemployment rate stalled at 7.6 percent over the quarter but has since ticked down to 7.4 percent as labor force participation remains historically depressed.
- Substantial slack in the labor market remains. Despite recent job growth, the employment-population ratio has barely budged from recessionary lows. In addition, job gains over the past few months have been insufficient in denting underemployment. The number of workers employed part time for economic reasons ticked up to 8 million over the past three months.
- Income growth firmed over the three months that ended in June, but disposable income is up only 1.8 percent over the past year.
- Growth in the money supply picked up a bit over the quarter but remains consistent with its 12-month trend. Bank credit growth has slowed, however, which should curb M2 even as the Fed continues its current pace of QE.
- The global backdrop has softened in recent months, with slower growth in China overshadowing a more stable outlook in Europe. We look for global growth to pick up later this year, but for the global economy in 2013 to expand at its slowest rate since 2009.

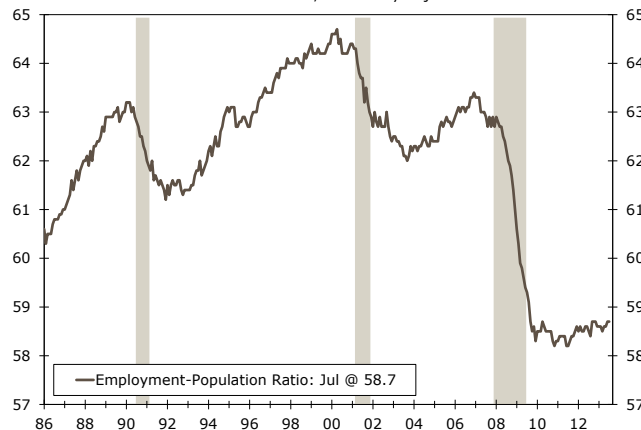
Real Global GDP Growth (Wells Fargo)

Year-over-Year Percent Change, PPP Weights



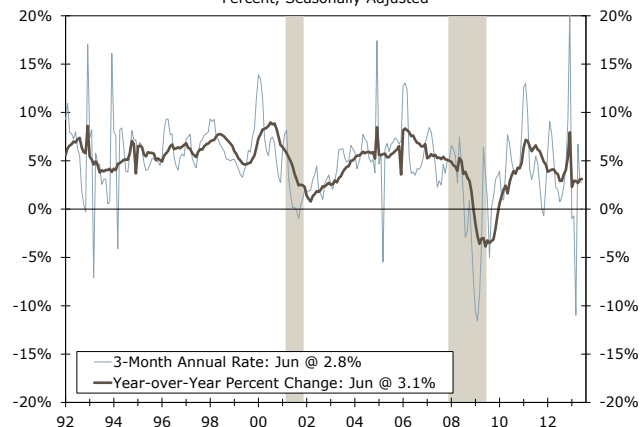
Employment-Population Ratio

16 Years and Over, Seasonally Adjusted



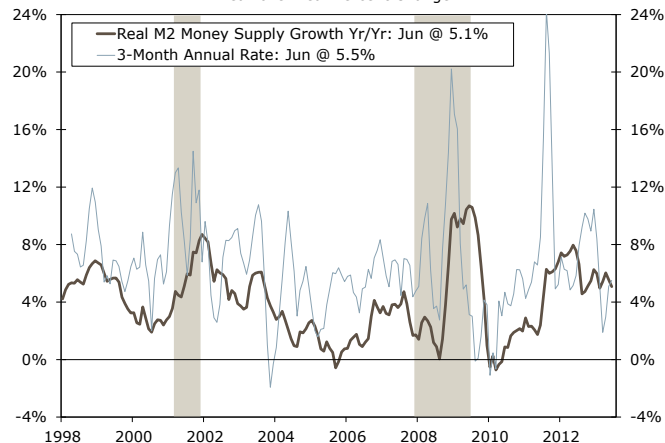
Personal Income

Percent, Seasonally Adjusted



Real M2 Money Supply Growth

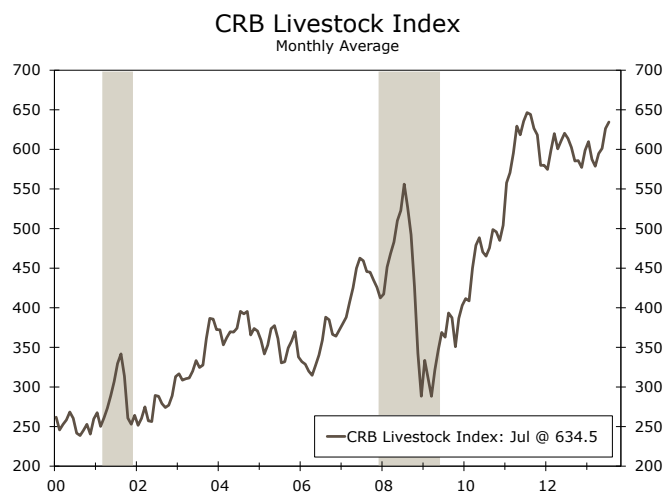
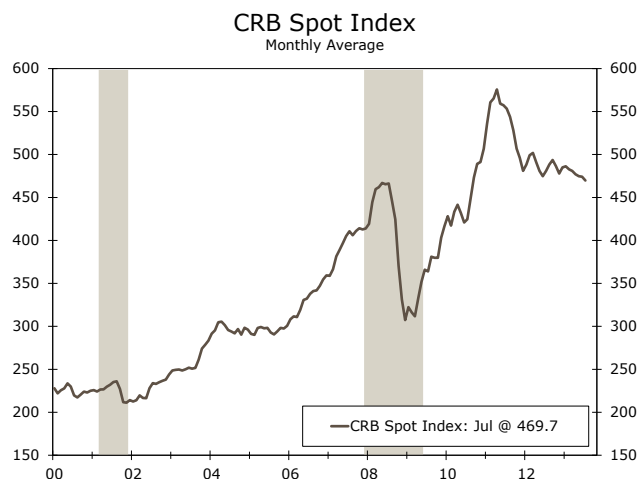
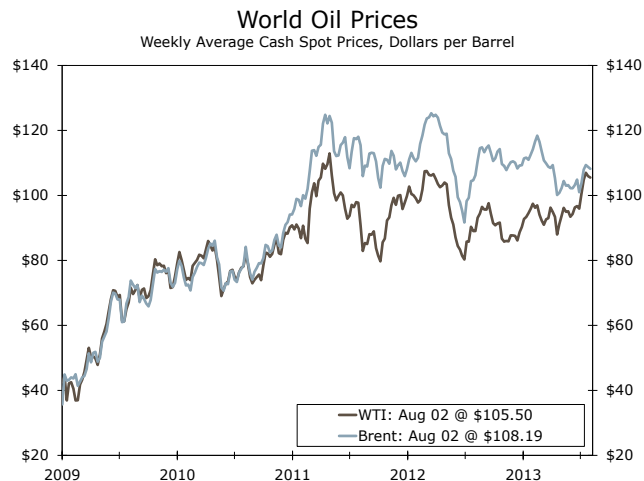
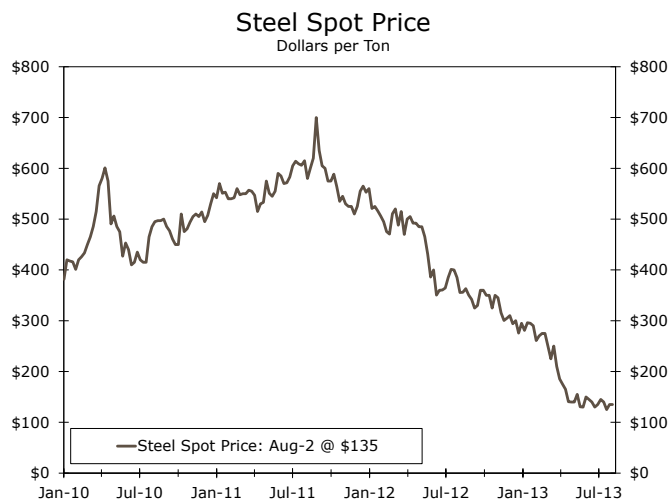
Year-over-Year Percent Change



Source: U.S. Dept. of Labor, U.S. Dept. of Commerce, Federal Reserve Board, IMF and Wells Fargo Securities, LLC

Commodity Prices

- Rising oil prices have been a key driver of the uptick in inflation since May. The price of Brent held relatively steady through the second quarter, but has risen 6 percent since June. WTI has seen a significantly stronger advance, up 10 percent over the past month as infrastructure improvements have allowed stocks to flow out of Cushing, Okla. and have reduced the glut of inventories.
- Outside of energy products, commodity prices have been more benign. The CRB Index fell 1.7 percent over the second quarter and moved down further in July.
- Food-related commodity prices have steadied in recent months. The CRB Index for foodstuff in July ran 4.0 percent below its year-earlier level following last summer's drought-triggered spike. Crop prices have continued to move lower since the start of the year. While heavy rains have delayed plantings, the rain has provided favorable ground conditions and is expected to boost yields this fall. However, livestock prices have moved higher in recent months, led by a 23 percent increase in hog prices since March.
- Weaker economic activity in Asia has held down prices for metals. The CRB metals index has steadily declined since recent highs in February. Copper prices fell 11 percent over the second quarter, but regained some ground during July. Steel prices have also declined on slower growth in China, falling more than 50 percent since the start of the year.

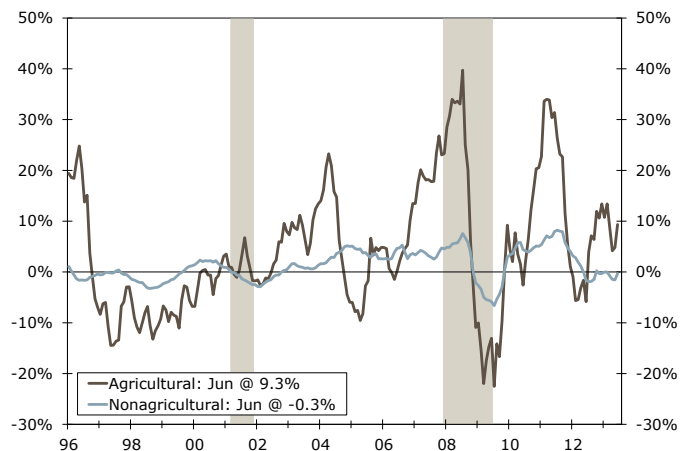


Source: Chicago Mercantile Exchange, Bloomberg LP and Wells Fargo Securities, LLC

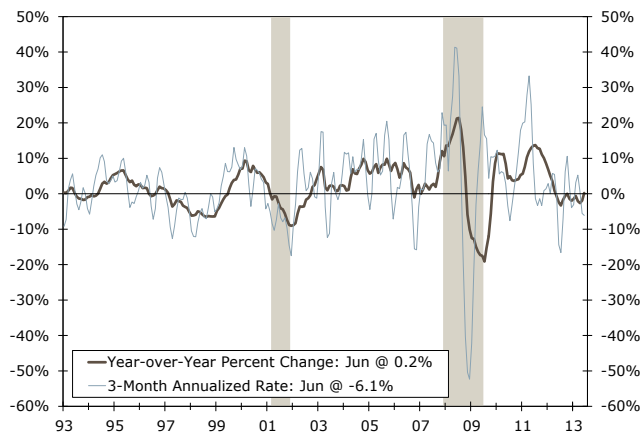
Import and Export Prices

- Sluggish global demand and a strengthening dollar pushed trade prices down over the second quarter. The import price index fell 0.9 percent, more than reversing a fuel-driven gain of 0.4 percent in the first quarter.
- The fuel import index fell over the second quarter, while nonfuel import prices declined across a broad array of product categories. Prices for nonfuel industrial products, capital goods, autos and consumer goods have fallen since the first quarter.
- The widespread decline in import prices stemmed in part from a strengthening dollar. The broad dollar index, which weighs the dollar against the currencies of the nation's major trading partners, moved steadily higher throughout the quarter.
- Import prices by locality of origin also pulled back across all major regions in the second quarter. Prices for goods from Japan fell 1.4 percent, the most since 2002.
- Soft global demand has kept a lid on export prices since the first quarter. Export prices declined 1.1 percent over the quarter and are slightly down from a year ago. The index for nonagricultural exports was dragged lower by a drop in prices for non-auto consumer goods and industrial supplies and materials.
- Following a drop in April, agricultural export prices rose in May and June on increases in soybeans and corn. On a year-ago basis, prices are up 9.3 percent but should moderate following the leap in prices last summer.

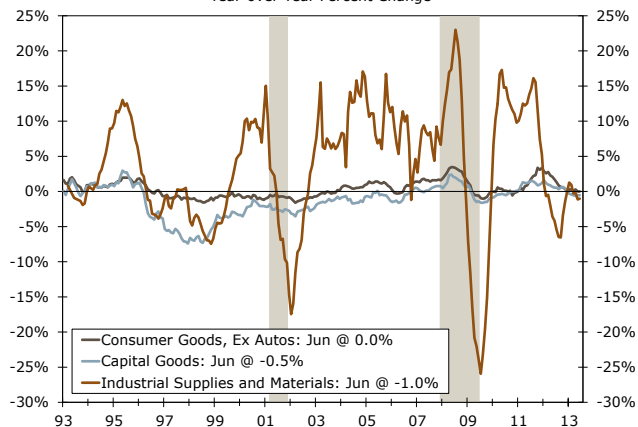
Export Prices - Agricultural vs. Nonagricultural
 Year-over-Year Percent Change



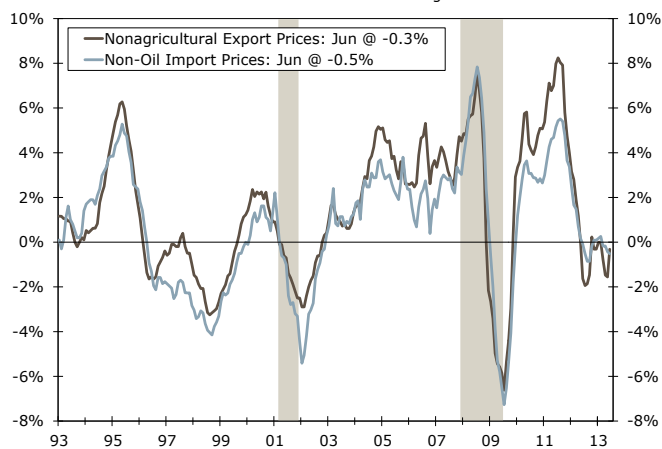
Import Prices
 All Commodities



Import Prices By Sector
 Year-over-Year Percent Change



"Core" Trade Prices
 Year-over-Year Percent Change



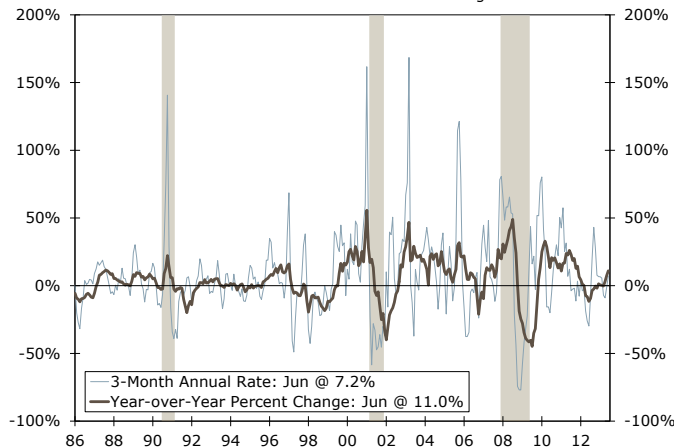
Source: U.S. Department of Labor and Wells Fargo Securities, LLC

Producer Prices

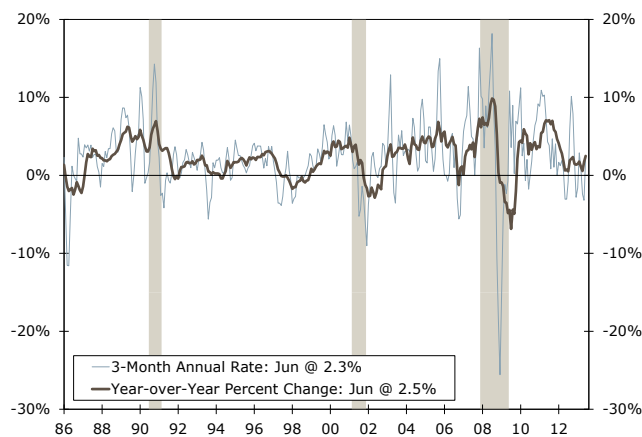
- Headline inflation at the producer level remained soft over the second quarter, falling at an annualized rate of 1.1 percent. Toward the end of the quarter, however, producer price inflation began to firm. Prices for energy goods picked up in May and June as gasoline prices moved higher. Food prices also crept up late in the quarter and were up 2.7 percent from the first quarter as unprocessed food rose 12.1 percent from a year earlier. Processed food inflation at the producer level has moderated to a 2 percent year-over-year rate.
- Core finished goods inflation remains soft. Price growth for finished goods excluding food and energy slowed to an annualized rate of 1.4 percent in the second quarter and is up only 1.7 percent from a year ago.
- Further back in the pipeline, inflation remains contained. Prices for core intermediate goods fell at an annualized rate of 0.8 percent from the first quarter, while total intermediate prices fell at a 3.3 percent rate due primarily to lower energy prices early in the quarter.
- Headline crude prices edged lower in the second quarter as falling prices for food and core goods offset an advance in energy prices. Falling commodities prices from slower global growth and better crop conditions have helped to stabilize the core foodstuff and feedstuff index, but prices are up 10.4 percent from last June. Core crude good prices are offering some relief, down 2.2 percent from a year ago.

Crude Materials Producer Price Index

Crude Materials for Further Processing

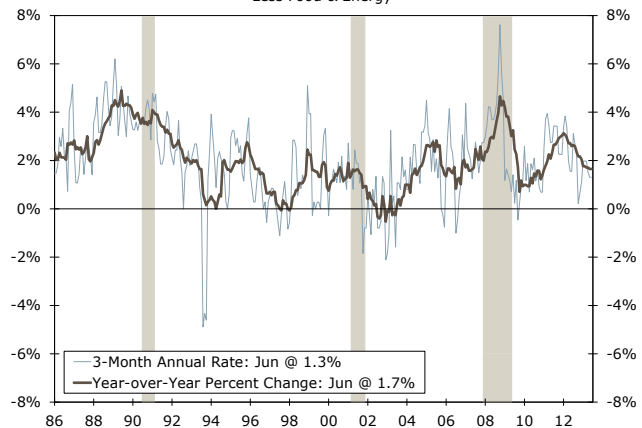


Finished Goods Producer Price Index



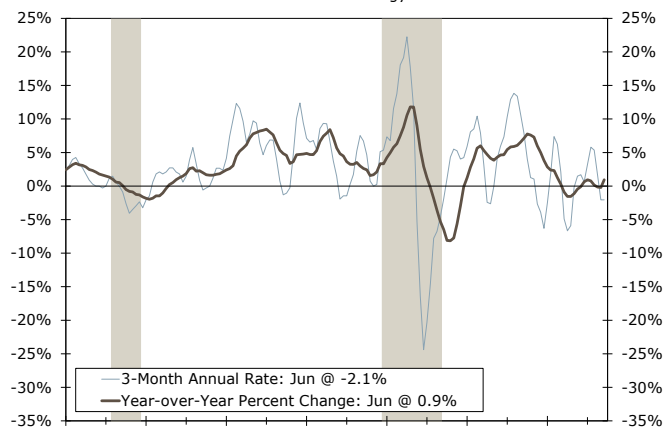
Core Finished Goods Producer Price Index

Less Food & Energy



Core Intermediate Goods Producer Price Index

Less Food & Energy

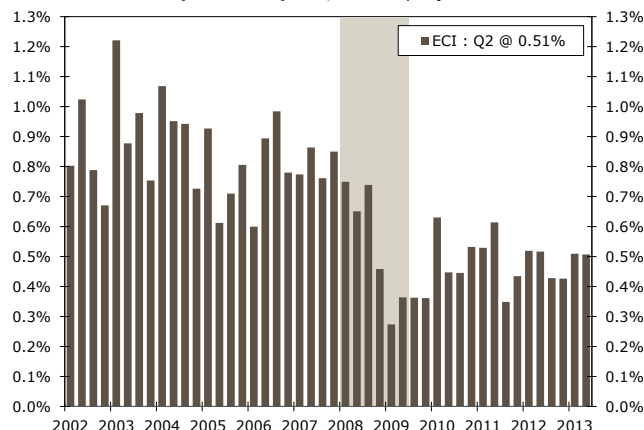


Source: U.S. Department of Labor and Wells Fargo Securities, LLC

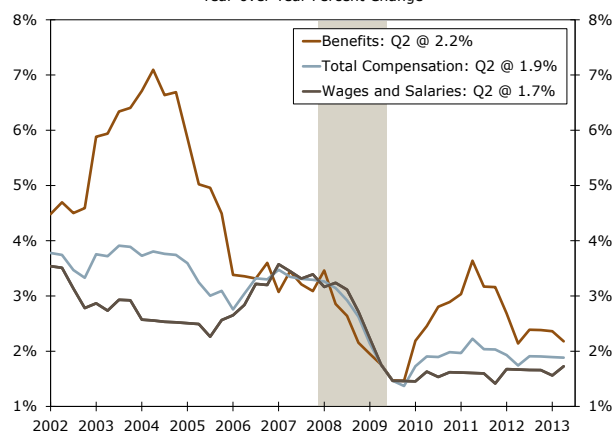
Employment Costs

- Growth in labor compensation steadied in the second quarter. The Employment Cost Index (ECI) rose 0.5 percent over the quarter, the same pace as the previous period. Historically high unemployment and underemployment continue to keep the pace of compensation costs subdued. Growth in total compensation costs held steady at 1.9 percent over the past year, although workers are starting to see slightly stronger growth in wages and salaries rather than benefits.
- Wage and salary growth for private industry workers has picked up, led by a gain in the financial and education industries. State and local government workers continue to see weaker wage growth than their private industries counterparts as government budgets remain under pressure. The overall trend in wage growth continues to be weak, increasing 1.7 percent from a year ago. Wage growth has averaged 1.6 percent year over year during this expansion, far from the 2.9 percent average during the 2002–2007 expansion.
- Cost increases for benefits remain historically modest, increasing 2.2 percent from a year ago. State and local benefit costs continue to outstrip private industry costs. Looking ahead, we expect benefit cost growth to pick up with the adoption of the Affordable Care Act.
- With a substantial amount of excess labor still to be absorbed, we expect compensation cost pressures to remain tame over the next few quarters.

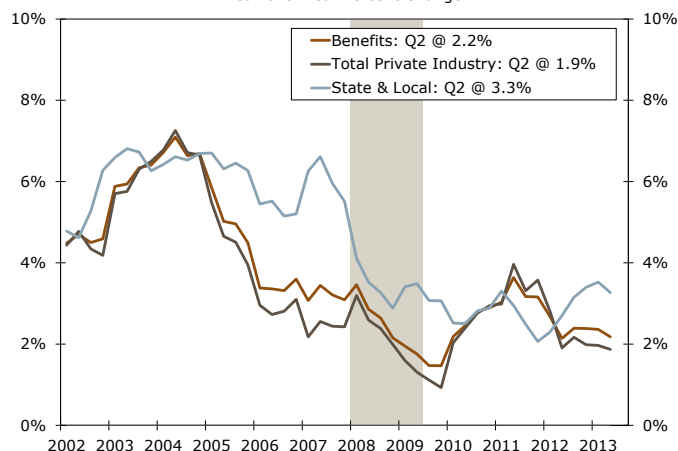
Employment Cost Index - All Workers
Quarter-over-Quarter, Seasonally Adjusted



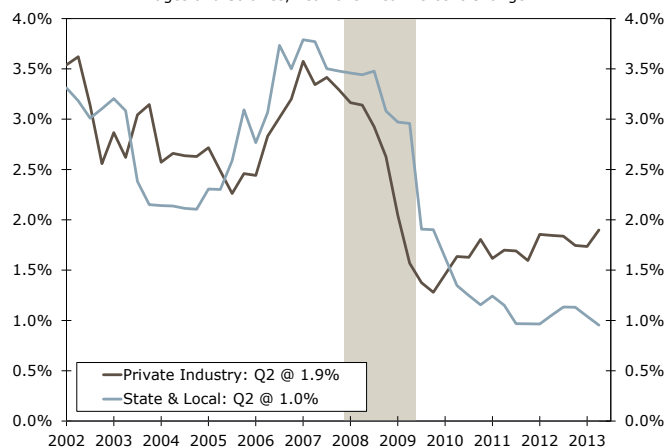
Employment Cost Index - All Workers
Year-over-Year Percent Change



Benefits Comparison
Year-over-Year Percent Change



Private Workers and State & Local Government
Wages and Salaries, Year-over-Year Percent Change



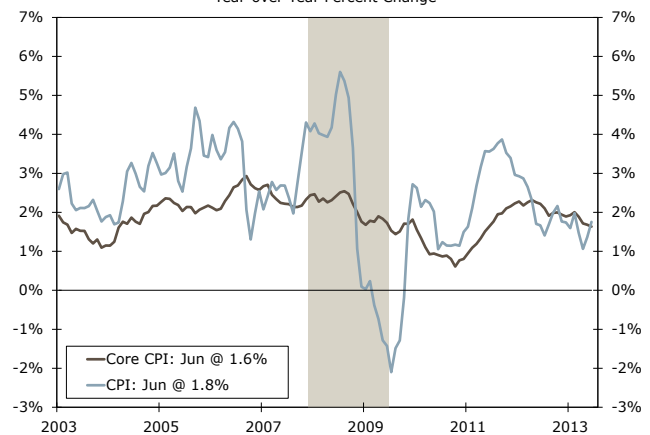
Source: U.S. Department of Labor and Wells Fargo Securities, LLC

Consumer Prices

- After declining in April, consumer price inflation picked up over the remainder of the quarter, increasing 0.5 percent in June. The year-over-year pace of headline CPI inflation also moved higher, but remained manageable at 1.8 percent.
- Energy prices drove the late-quarter pickup, with gasoline prices accounting for two-thirds of June's increase in the consumer price index. While gas prices have fluctuated in recent weeks, the average retail price in July was roughly in line with June, suggesting gas prices will be less influential on the headline in July.
- Food prices posted a modest year-over-year increase of 1.4 percent as base effects from last year's drought are keeping growth in food at home prices low. Prices for food away from home continued their steady ascent and are up 2.2 percent from a year earlier.
- Stripping away the volatile food and energy components, core CPI softened to a 1.6 percent pace from a year ago. Core price growth was held down in part by slower growth in medical care costs. The CPI for medical care rose at its slowest rate in the second quarter since 1971 and was up only 2.1 percent from a year ago.
- Increased activity in the housing market has pushed housing costs higher in recent months. The shelter component increased 2.3 percent from a year ago, up slightly from March. Owners' equivalent rent continues to underpin much of the rise, although rental prices in June rose 2.9 percent from a year earlier.

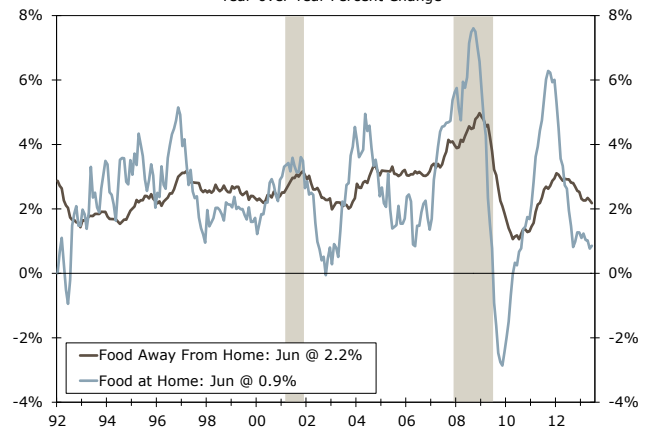
Headline CPI vs. "Core" CPI

Year-over-Year Percent Change



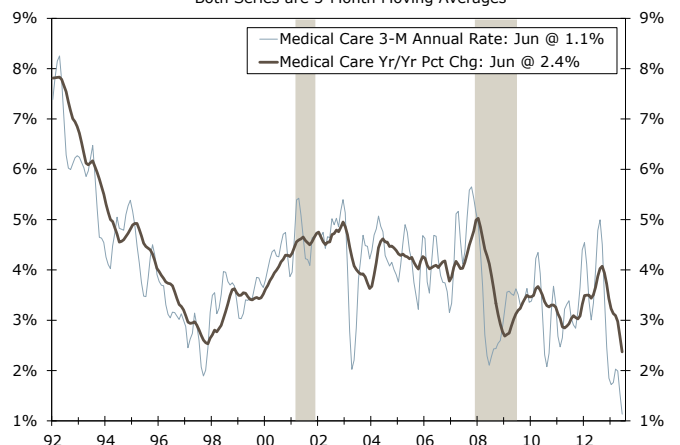
Food - At Home vs. Away from Home

Year-over-Year Percent Change



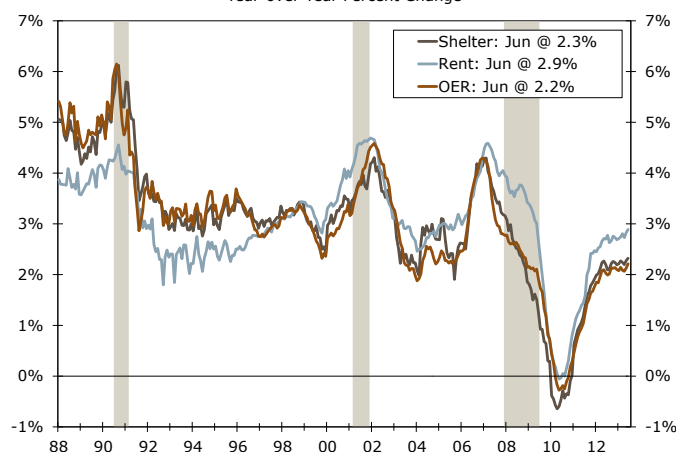
U.S. CPI - Medical Care

Both Series are 3-Month Moving Averages



Shelter, OER & Rent Costs

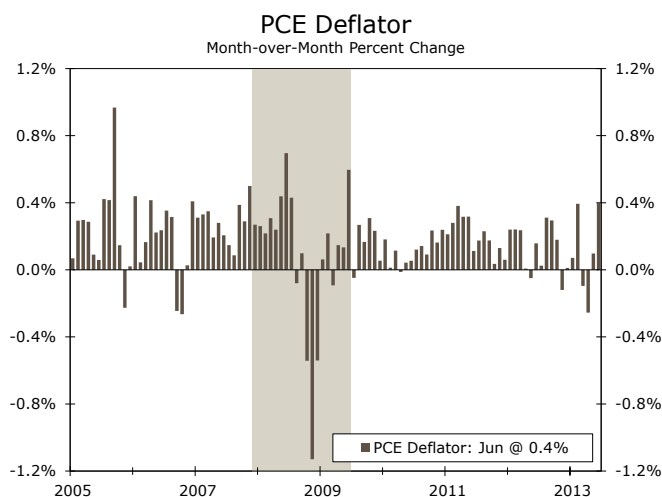
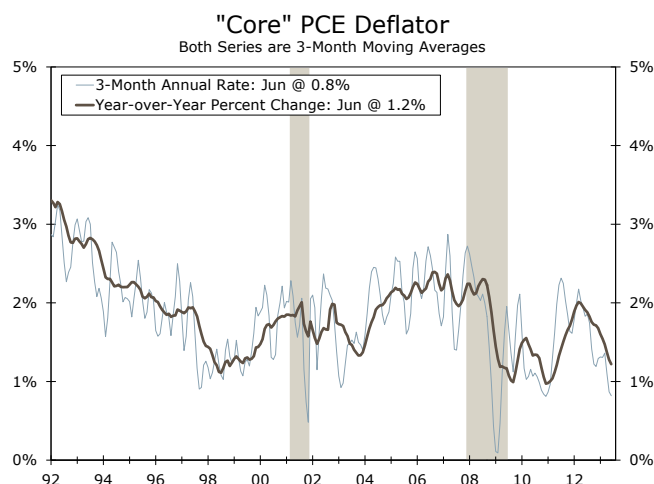
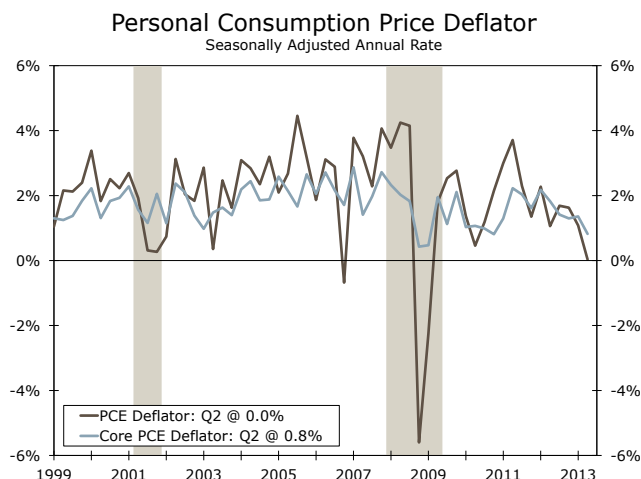
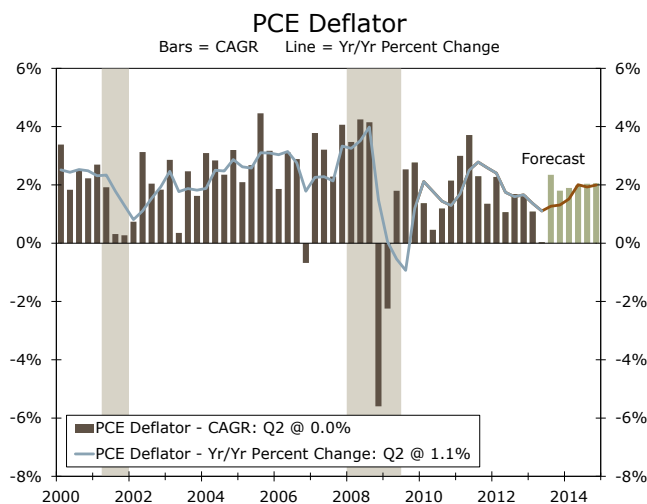
Year-over-Year Percent Change



Source: U.S. Department of Labor and Wells Fargo Securities, LLC

PCE Deflator

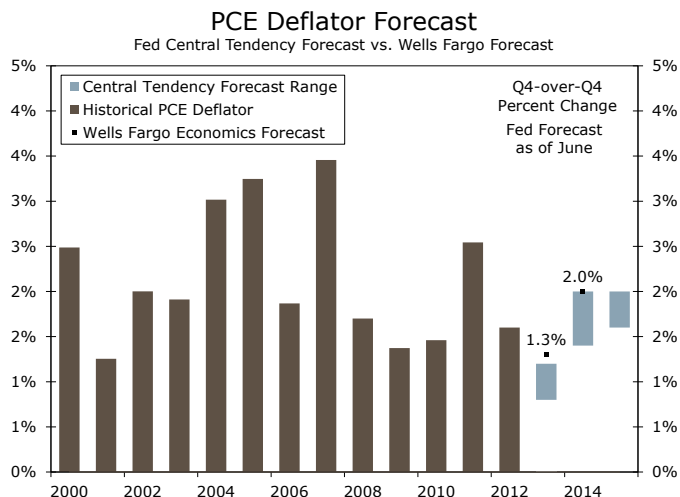
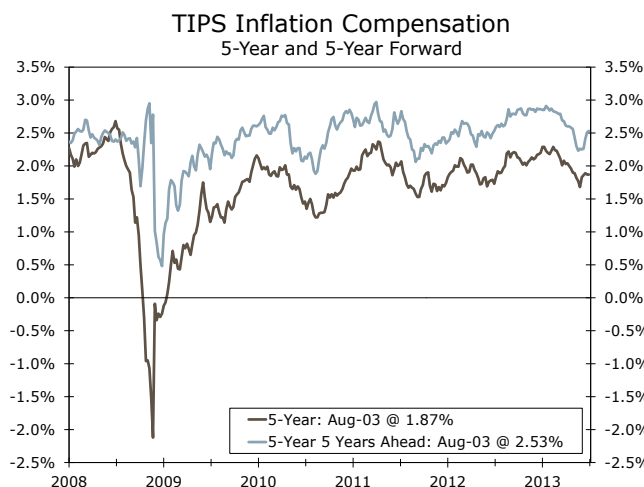
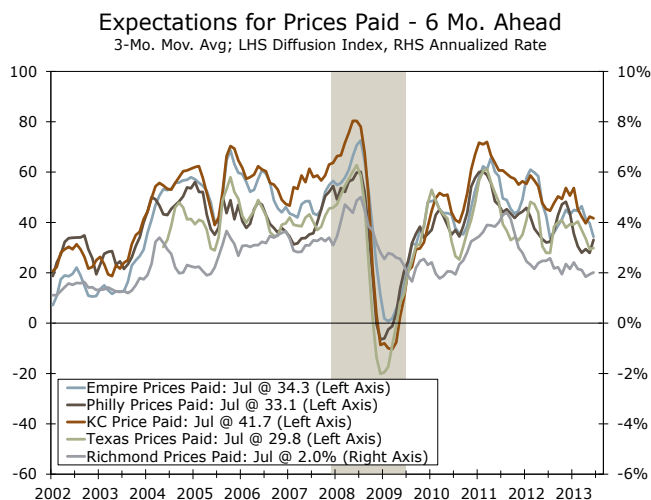
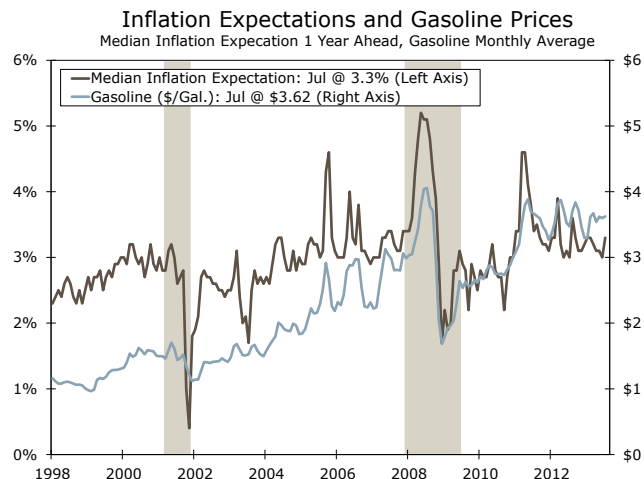
- Looking at the Fed's preferred measure of inflation, the price level of consumer goods was flat over the second quarter. A 1.8 percent annualized increase in prices for services offset a 3.3 percent annualized decrease in prices for goods—the steepest drop in this category since 2009. On a year-over-year basis, prices slipped to a 1.1 percent rate.
- Core price growth was firmer, but remains relatively weak. Excluding food and energy, prices rose at a 0.8 percent annualized rate in the second quarter and are up only 1.2 percent from a year ago.
- Despite the weak quarterly readings, price growth looked healthier as the quarter proceeded. The headline PCE index rose 0.4 percent in June after declining 0.3 percent in April. Similarly, the core index edged steadily higher after a flat reading in April and registered a 0.2 percent increase in June.
- This steady uptrend in price growth over the past quarter should allay the FOMC's concern about inflation running too far below its target. In its latest statement, the FOMC noted that low inflation poses a downside risk to the outlook. However, we agree with the Fed's expectations of a modest pickup in prices through the second half of the year. Although a notable amount of slack in the labor market remains, wages and employment are trending higher, and energy prices—one of the key drivers of lower inflation in recent months—have stabilized.



Source: U.S. Department of Commerce, Federal Reserve Board and Wells Fargo Securities, LLC

Inflation Expectations

- Households' expectations for inflation over the next year moderated over the second quarter, falling to 3.0 percent in June from 3.2 percent in March. However, expectations picked up in July as gas prices rose in the second half of the month. With modest price growth in less conspicuous products, overall inflation expectations should remain tame.
- The recent moderation in producer prices and more stable commodity prices have led to a stabilization in the expected rate of prices paid over the next six months. Regional Fed surveys broadly reported easing expectations for prices over the past few months. Expectations for prices received also moderated, which should keep inflation pressures further down the pipeline manageable.
- Financial markets' inflation expectations have ticked up over the past few weeks after marching progressively lower since March. The five-year implied rate of inflation has risen 19 bps. from a recent low in at the end of June. The five-year forward rate of inflation has perked up 30 bps. to 2.53 percent.
- Fed officials lowered forecasts for inflation in their June economic projections. The central tendency for the year-over-year rate of the core PCE deflator in the fourth quarter of this year fell 0.3 percentage points to 1.2–1.3 percent. Members expect the pace to rise in 2014 as the economy firms, but to remain below the committee's long-run target of 2 percent.



Source: Univ. of Michigan/Thompson Reuters, OPIS, Federal Reserve System and Wells Fargo Securities, LLC

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