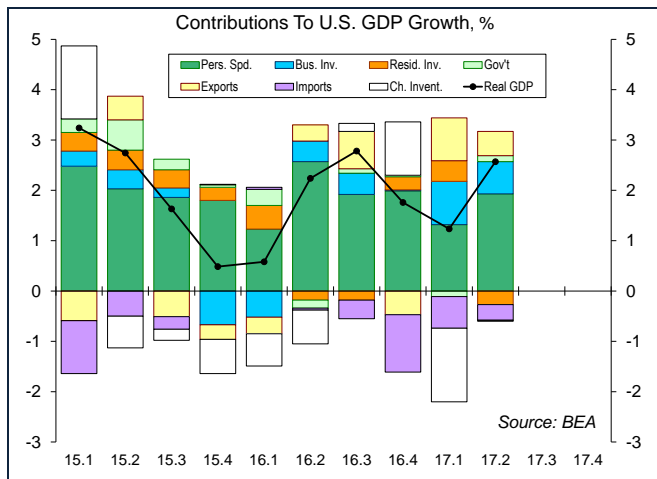


Economic Trends

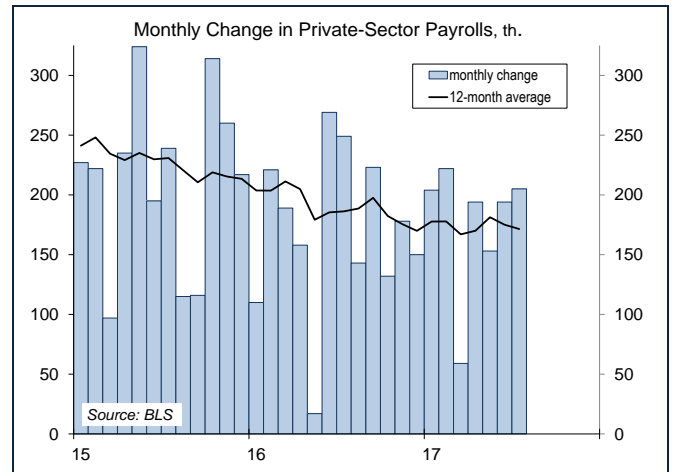
Still in the Sweet Spot?

- Recent economic data have remained consistent with moderate economic growth in the near term.
- Federal Reserve policymakers continue to expect that economic conditions will warrant a gradual pace of increases in short-term interest rates. The Fed expects to begin unwinding its balance sheet "relatively soon" (most likely October).
- Fiscal stimulus, through increased infrastructure spending program or major tax reform, looks doubtful, but lawmakers may still lower tax rates in the months ahead.

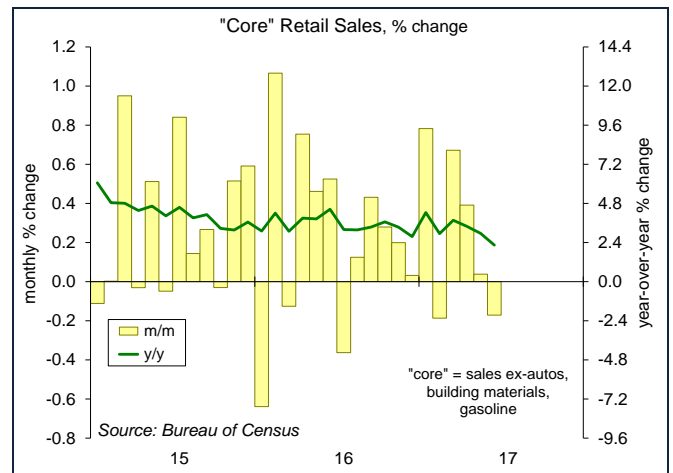
Real GDP rose at a 2.6% annual rate in the advance estimate for 2Q17, better than in 1Q17, but far short of the strong expectations held at the start of the quarter (when many economists were looking for 3.5-4.0% growth or more). The first half average was a 1.9% annual rate. Consumer spending growth picked up, as expected, in 2Q17, although monthly figures showed a significant loss of momentum at the end of the quarter. Business fixed investment slowed following the sharp rise in 1Q17, but remained relatively strong, with mining structures (which includes oil and gas well drilling) accounting for nearly half of the first half gain. The mild winter appears to have pulled forward residential construction activity (making 1Q17 look stronger and 2Q17 look weaker). Inventory growth slowed sharply in 1Q17, subtracting about 1.5 percentage points from growth (and pushing down the average for the first half). Inventory growth failed to rebound in 2Q17.



Nonfarm payrolls continued to advance at a moderately strong pace in July. There's a fair amount of noise in the monthly figures (reported accurate to ±120,000), but that balances out over time. Private-sector payrolls have averaged a 176,000 monthly gain in 2017, roughly the same as the 170,000 pace in 2016. That's beyond a long-term sustainable pace, which is okay (as labor market slack is reduced).

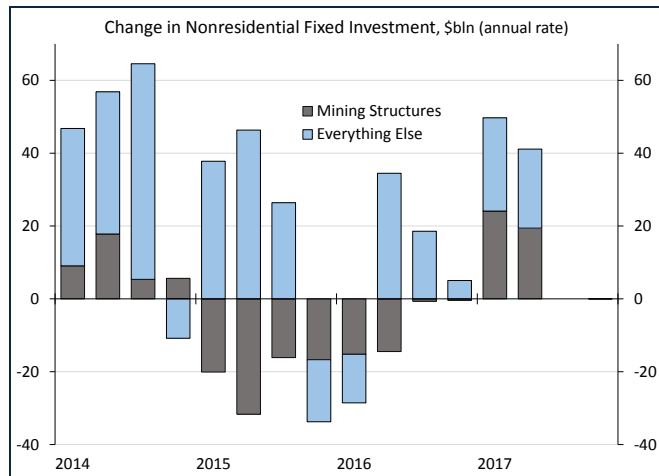


Despite the continued tightening in labor market conditions, wage growth has remained moderate. Average hourly earnings are trending 2.5% higher than a year ago. Firms are reporting faster wage increases for certain skilled labor positions, but there's been no sign of a broad acceleration in wages. That may reflect reduced bargaining power for workers, slower productivity growth, and low inflation, but wage growth is likely to pick up if the unemployment rate continues to trend lower.



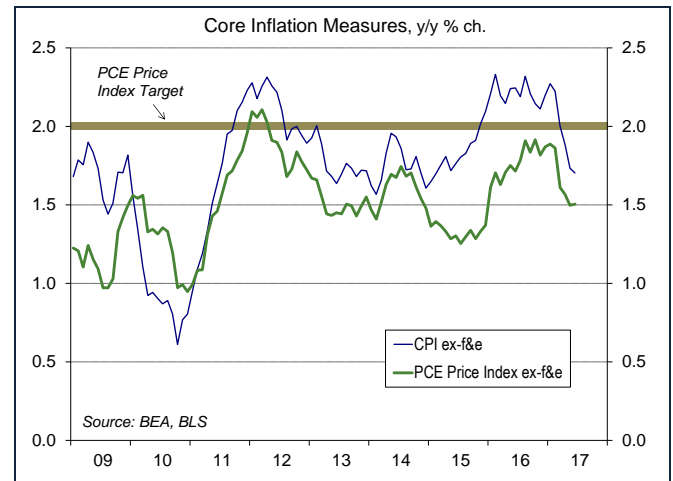
Retail payrolls rose modestly in July, but have fallen by about 80,000 since January, consistent with softer retail sales growth and suggesting some strains in household finances. Rents have been rising faster than overall inflation. Higher out-of-pocket healthcare expenses (annual resets in health insurance deductibles, along with higher insurance costs) are likely limiting discretionary spending. Recent benchmark revisions to the personal income data showed a slower trend in inflation-adjusted income growth over the last year. However, real wage growth has been picking up, which should provide support for consumer spending growth in the near term.

Business optimism surged following the presidential election and has remained elevated in recent months. That enthusiasm has likely contributed to the increase in business fixed investment in the first half of the year, but the recovery in energy exploration has played a big part. Oil and gas well drilling is capital intensive. While lower gasoline prices are helpful for consumer spending, the contraction in energy exploration was a significant drag on GDP growth in 2015 and 2016. The recovery is expected to slow over time, but still has some legs in the near term (adding to GDP growth).



Inflation figures, which appeared to firm up in the first couple of months of the year, have since moderated. The sharp drop in wireless telecom services in March shaved a few percentage points from the year-over-year inflation rate. That will roll off the 12-month calculation next March, but even accounting for that anomaly, core inflation is still trending below the Fed's 2% target. However, it's not *past* inflation that the Fed is worried about. Most Fed officials believe that we are near full employment. Wage inflation would pick up more

forcefully if the unemployment rate continues to trend lower, and the Fed would have a greater challenge getting things back to normal. At the same time, the low inflation trend allows the central bank to be gradual in raising short-term interest rates. At this point, the Fed seems likely to refrain from raising rates at the mid-September policy meeting, but is expected to start again at the mid-December meeting. The Fed has signaled that balance sheet reduction will likely begin in October (to be announced after the September policy meeting. This is going to be a lengthy process, starting slow (\$10 billion per month), but with the pace picking up every three months.



Following the failure to repeal and replace the Affordable Care Act, attention in Washington will turn to tax reform. Shifting to a more efficient and fair tax system (significantly lowering tax rates and limiting deductions) is a nearly impossible task, but we ought to see some reduction in tax rates in the months ahead (just more moderate than many had hoped for). Congress also has to come up with a budget by the new fiscal year (October 1) and raise the debt ceiling.

	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	2016	2017	2018
GDP (↓ contributions)	2.8	1.8	1.2	2.6	<b>2.5</b>	<b>2.2</b>	<b>2.0</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	1.5	<b>2.1</b>	<b>2.1</b>
consumer durables	0.7	0.7	0.0	0.5	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	0.4	<b>0.4</b>	<b>0.2</b>
nondurables & services	1.2	1.3	1.3	1.5	<b>1.4</b>	<b>1.3</b>	<b>1.3</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	1.5	<b>1.4</b>	<b>1.3</b>
bus. fixed investment	0.4	0.0	0.9	0.6	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	-0.1	<b>0.5</b>	<b>0.3</b>
residential investment	-0.2	0.3	0.4	-0.3	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	0.2	<b>0.1</b>	<b>0.2</b>
Priv Dom Final Purchases	2.6	2.7	3.1	2.7	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>	<b>2.2</b>	<b>2.1</b>	<b>2.1</b>	2.3	<b>2.8</b>	<b>2.3</b>
government	0.1	0.0	-0.1	0.1	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	0.1	<b>0.0</b>	<b>0.1</b>
exports	0.7	-0.5	0.9	0.5	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	0.0	<b>0.4</b>	<b>0.4</b>
imports	-0.4	-1.1	-0.6	-0.3	<b>-0.5</b>	<b>-0.5</b>	<b>-0.5</b>	<b>-0.4</b>	<b>-0.4</b>	<b>-0.4</b>	-0.2	<b>-0.6</b>	<b>-0.4</b>
Final Sales	2.6	0.7	2.7	2.6	<b>2.0</b>	<b>2.0</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	1.9	<b>2.2</b>	<b>2.0</b>
ch. in bus. inventories	0.2	1.1	-1.5	0.0	<b>0.5</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	-0.4	<b>-0.1</b>	<b>0.1</b>
Unemployment, %	4.9	4.7	4.7	4.4	<b>4.3</b>	<b>4.2</b>	<b>4.2</b>	<b>4.2</b>	<b>4.3</b>	<b>4.3</b>	4.9	<b>4.4</b>	<b>4.2</b>
NF Payrolls, monthly, th.	239	148	166	194	<b>160</b>	<b>150</b>	<b>140</b>	<b>135</b>	<b>130</b>	<b>125</b>	187	<b>154</b>	<b>133</b>
Cons. Price Index (q/q)	1.8	3.0	3.1	-0.3	<b>1.0</b>	<b>1.9</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	1.3	<b>1.9</b>	<b>1.7</b>
excl. food & energy	2.1	2.0	2.5	0.6	<b>1.6</b>	<b>1.8</b>	<b>1.8</b>	<b>1.9</b>	<b>1.9</b>	<b>2.0</b>	2.2	<b>1.8</b>	<b>1.7</b>
PCE Price Index (q/q)	1.7	2.0	2.2	0.3	<b>1.2</b>	<b>1.8</b>	<b>1.8</b>	<b>1.9</b>	<b>1.9</b>	<b>1.9</b>	1.1	<b>1.6</b>	<b>1.7</b>
excl. food & energy	2.0	1.3	1.8	0.9	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>	1.7	<b>1.6</b>	<b>1.7</b>
Fed Funds Rate, %	0.40	0.45	0.70	0.94	<b>1.16</b>	<b>1.21</b>	<b>1.41</b>	<b>1.44</b>	<b>1.66</b>	<b>1.71</b>	0.39	<b>1.01</b>	<b>1.56</b>
3-month T-Bill, (bond-eq.)	0.3	0.4	0.6	0.9	<b>1.2</b>	<b>1.3</b>	<b>1.4</b>	<b>1.5</b>	<b>1.6</b>	<b>1.8</b>	0.3	<b>1.0</b>	<b>1.6</b>
2-year Treasury Note	0.7	1.0	1.2	1.3	<b>1.6</b>	<b>1.8</b>	<b>1.9</b>	<b>2.0</b>	<b>2.2</b>	<b>2.3</b>	0.8	<b>1.5</b>	<b>2.1</b>
10-year Treasury Note	1.6	2.1	2.5	2.3	<b>2.5</b>	<b>2.6</b>	<b>2.9</b>	<b>3.0</b>	<b>3.1</b>	<b>3.2</b>	1.8	<b>2.4</b>	<b>3.0</b>