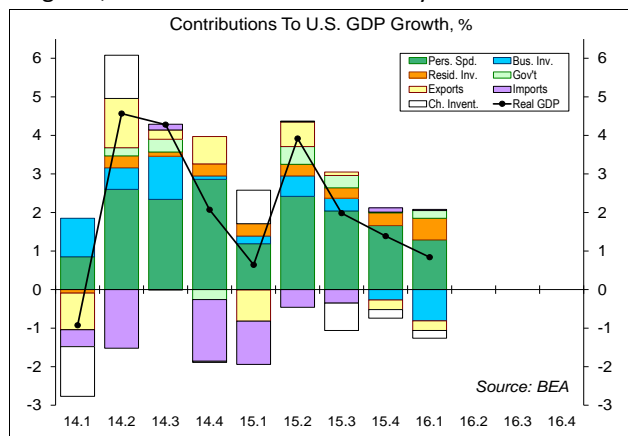


Monthly Economic Outlook

Jobs and Growth: Diminished Expectations

- *Nonfarm payrolls rose more slowly in the three months ending in May, which may reflect noisy data. However, job gains will slow as the labor market tightens, and future labor force growth will be a lot slower than in previous decades.*
- *U.S. economic growth is likely to be moderately strong in the near term, led by consumer spending, but restrained by continued subpar global growth and cautious business investment.*
- *The Fed's policy outlook is geared on tighter labor market conditions and a desire to normalize policy over time. However, asymmetric risks, global concerns, and business caution should keep short-term interest rates on a gradual path.*

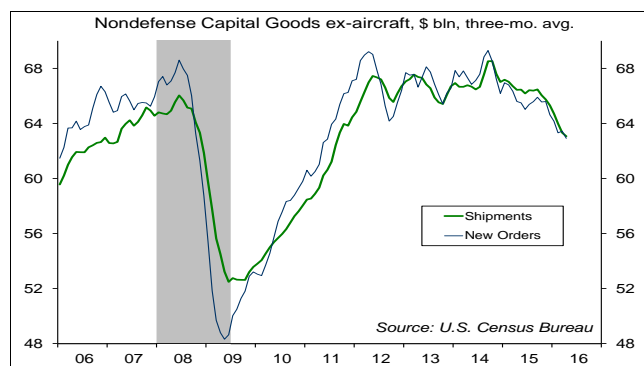
Real Gross Domestic Product (GDP), the aggregate sum of goods and services produced in the economy, was reported to have risen at a 0.8% annual rate in the second estimate for 1Q16 (vs. +0.5% in the advance estimate). The early Easter appears to have shifted some activity from March to April (most economic data are adjusted for floating holidays, but it's hard to get it right). Strength in April largely reflected a bounce back from a soft March. Hence, figures for May and June will be key in gauging the underlying momentum of the economy. Note that annual benchmark revisions to GDP will be released on July 29 (along with the advance estimate of 2Q16 GDP growth). The Bureau of Economic Analysis will make some attempts to reduce residual seasonality (first quarter growth has been reported suspiciously low over the last six years). As usual, investors should not get too hung up on any particular GDP figures, but instead focus in the story behind the numbers.



Consumer spending accounts for nearly 70% of overall economic activity. The household fundamentals have been solid. The strong job growth of the last few years and moderate growth in average hourly earnings has provided fuel for spending, while lower gasoline prices have added to consumer purchasing power. Surveys show that consumers are

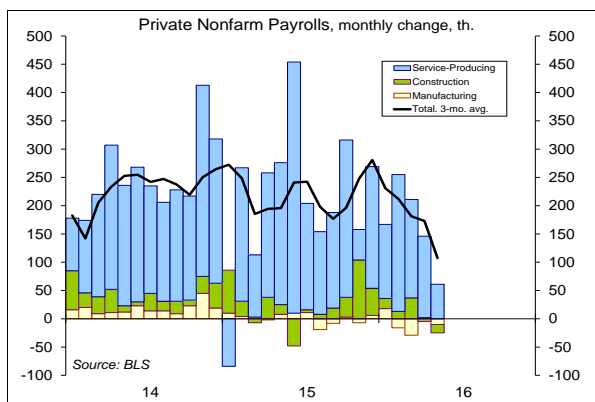
generally feeling better about their personal financial situations, but are also concerned about the economy's future prospects. Clearly, while most consumers have been doing better in recent years, many have not participated fully in the economic recovery. Regarding the issue of income inequality, most Americans do not begrudge success, if earned. However, many economists are concerned about the whittling away of the middle class over the last few decades and a rising inequality of opportunity.

Business fixed investment (capital spending) accounts for about 12-13% of GDP, but is highly cyclical, rising in expansions and falling sharply in recessions. Much of the weakness has been concentrated in the energy sector. The Federal Reserve's industrial production data show that oil and gas well drilling activity fell about 75% from late 2014 to April 2016, and mining structures (which includes investments in energy extraction) accounted for about three-fourths of the decline in 1Q16 business fixed investment. Of course, the energy sector isn't going to contract forever – and will therefore be less of a drag on GDP growth in the quarters ahead. However, outside of energy, capital spending has been soft. Anecdotal evidence suggests that some firms pared inventories in expectation of weaker growth and have scrambled a bit to restock.



Weakness in capital spending may be due to a number of factors. Businesses are generally cautious. The global economy is still soft. The United Kingdom's June 23 referendum on membership in the European Union has added uncertainty. The strong dollar, particularly in regard to our two biggest trading partners (Canada and Mexico) remains an important issue for U.S. exporters. The election cycle (good news – we have only five more months to go) often adds uncertainty, especially in a year when the president is not up for re-election. Importantly, firms generally have the means to expand. Expansion projects have been delayed, while firms have continued to hoard cash. That ought to lend some optimism to the view that the slowdown in capital spending will prove to be transitory.

Until recently, there was little evidence that firms had curtailed hiring due to business caution. Nonfarm payrolls rose by 38,000 in the initial estimate for May, held back by 35,000 striking workers at Verizon (these workers will come back in the payroll total for June). Accounting for the strike, private-sector payrolls averaged a 119,000 monthly gain over the last three months (vs. a +214,000 average over the 12 previous months). The estimate of private-sector job growth from ADP, a payroll processing firm, rose by a 173,000 in May, suggesting a more moderate slowing in job growth (with continued strength in hiring by small and medium-sized firms). One explanation for the slowdown in job growth is that labor markets have grown tighter. Anecdotally, firms are reporting increased difficulty in finding qualified workers (or perhaps, more accurately, in finding qualified people willing to work for what the firm wants to pay).



Slower job growth, if due to tight labor markets, would not prevent the Fed from raising short-term interest rates. In fact, a tighter job market would make the Fed more likely to hike. However, the Fed would have a tougher time correcting course (later on) if it moves too rapidly, rather than too slowly.

Softer job growth (relative to the strong pace of the last

couple of years) should not be a surprise. Labor market slack has been taken up during the economic recovery, but the growth in the working-age population has slowed. Over the last 15 years, the labor force has averaged annual growth of just 0.6% per year, compared to an average of 1.8% between 1960 and 2000 (reflecting a significant rise in female labor force participation). The Bureau of Labor Statistics projects labor force growth of 0.5% per year over the next 10 years. We need to add fewer than 100,000 jobs per month to be consistent with the growth in the population. Some of the drop in labor force participation since the recession was due to discouraged workers (those wanting a job, but no longer looking, hence not officially considered “unemployed”). However, there now appear to be fewer such potential workers on the sidelines.

Barring a sharp rise in productivity growth or a substantial increase in immigration, real GDP growth will be a lot slower than what we’ve grown used to in recent decades. The Federal Reserve pegs long-term GDP growth at 2.0% (which assumes that productivity growth will pick up to 1.5% per year). Quarterly data on labor productivity are erratic (large swings and subject to large revisions). However, the trend over the last five years has been disturbingly low (about 0.5% per year). This slowdown in productivity growth is not well understood. It could be due to measurement issues, but it most likely reflects the subpar pace in capital spending during the recovery. Assuming capital spending picks up, the slowdown in productivity growth is likely to be temporary. Stronger productivity growth would help ease financing strains for entitlements (Social Security, Medicare). It would help to improve the standard of living for the typical worker and drive corporate profits in coming decades. If productivity growth fails to strengthen, the implications over time will be significant. Adding further anxiety for investors, softer labor force growth and slower productivity growth appear to be a worldwide phenomenon.

	3Q15	4Q15	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	2015	2016	2017
GDP (↓ contributions)	2.0	1.4	0.9	2.2	2.1	2.2	2.2	2.2	2.2	2.1	2.4	1.8	2.2
<i>consumer durables</i>	0.5	0.3	-0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2
<i>nondurables & services</i>	1.6	1.4	1.4	1.6	1.4	1.3	1.3	1.3	1.2	1.2	1.7	1.6	1.3
<i>bus. fixed investment</i>	0.3	-0.3	-0.8	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	-0.1	0.2
<i>residential investment</i>	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2
Priv Dom Final Purchases	3.2	2.0	1.2	2.7	2.4	2.3	2.3	2.2	2.2	2.1	3.3	2.3	2.3
<i>government</i>	0.3	0.0	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
<i>exports</i>	0.1	-0.3	-0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.0	0.2
<i>imports</i>	-0.4	0.1	0.0	-0.1	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.8	-0.1	-0.2
Final Sales	2.7	1.6	0.9	2.5	2.2	2.2	2.2	2.2	2.1	2.1	2.3	2.0	2.2
<i>ch. in bus. inventories</i>	-0.7	-0.2	-0.3	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.2	-0.3	0.0
Unemployment, %	5.1	5.0	4.9	4.8	4.7	4.7	4.7	4.8	4.8	4.8	5.3	4.8	4.8
NF Payrolls, monthly, th.	192	282	196	110	155	150	145	140	135	130	229	187	163
Cons. Price Index (q/q)	1.4	0.8	-0.3	2.7	2.1	2.0	2.1	2.1	2.0	1.9	0.1	1.3	2.1
<i>excl. food & energy</i>	1.8	2.2	2.7	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.8	2.2	1.9
PCE Price Index (q/q)	1.3	0.3	0.3	2.1	1.9	1.9	2.0	1.9	1.9	1.8	0.3	1.2	1.9
<i>excl. food & energy</i>	1.4	1.3	2.1	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.3	1.7	1.7
Fed Funds Rate, %	0.14	0.16	0.36	0.38	0.40	0.67	0.92	1.15	1.40	1.67	0.13	0.45	1.29
3-month T-Bill, (bond-eq.)	0.0	0.1	0.2	0.3	0.5	0.7	1.0	1.2	1.4	1.7	0.1	0.4	1.3
2-year Treasury Note	0.7	0.8	0.8	0.8	1.1	1.3	1.5	1.8	2.0	2.3	0.7	1.0	1.9
10-year Treasury Note	2.2	2.2	1.9	1.8	2.1	2.3	2.6	2.8	3.0	3.1	2.1	2.0	2.9