August 7, 2015

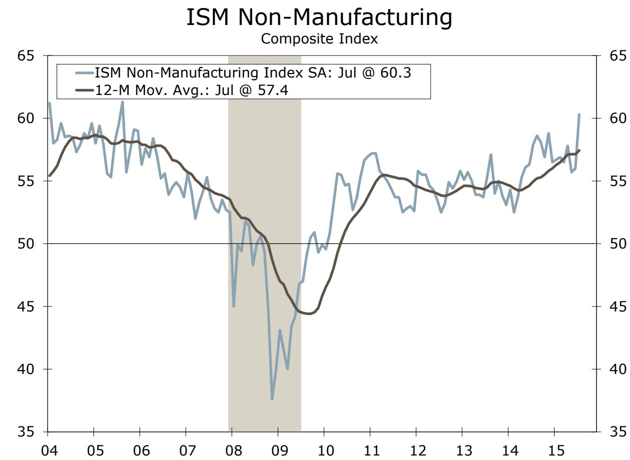
Economics Group

Weekly Economic & Financial Commentary

U.S. Review

Service Sector Sails Through Headwinds

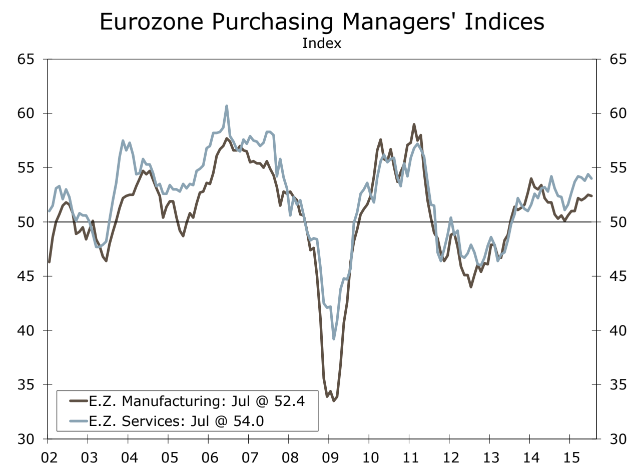
- Another solid employment report, with 215,000 net new jobs added, stronger wages and more hours worked point to a Fed rate hike in September.
- The service sector remains strong, with the ISM Non-manufacturing Index jumping 4.3 points to 60.3, the highest reading in more than a decade.
- Despite the broader strength in the economy, a stronger dollar and another slide in oil prices have weighed on growth. The ISM Manufacturing Index eased in July and the trade balance widened in June.



Global Review

Foreign Economies Continue to Grow at Modest Pace

- Recent economic data suggest that most foreign economies continue to grow, if only at a modest pace rate. The PMIs in the Eurozone and the United Kingdom in July remained above the demarcation line separating expansion from contraction. One policymaker at the Bank of England voted for a rate hike at this week's policy meeting.
- Canada may have slipped back into a modest recession in the first half of this year. Employment growth in Canada slightly beat expectations in July, as employers added 6,600 jobs in the month, while the unemployment rate remained at 6.8 percent. Through the monthly volatility, however, employment growth in Canada remains decidedly weak.



Wells Fargo U.S. Economic Forecast

	Actual				Forecast				Actual			Forecast	
	2014				2015				2012	2013	2014	2015	2016
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q					
Real Gross Domestic Product [1]	-0.9	4.6	4.3	2.1	0.6	2.3	1.8	2.5	2.2	1.5	2.4	2.2	2.7
Personal Consumption	1.3	3.8	3.5	4.3	1.7	2.9	3.2	3.0	1.5	1.7	2.7	3.0	2.9
Inflation Indicators [2]													
PCE Deflator	1.1	1.6	1.5	1.1	0.3	0.2	0.4	1.0	1.8	1.2	1.3	0.5	2.0
Consumer Price Index	1.4	2.1	1.8	1.2	-0.1	0.0	0.5	1.2	2.1	1.5	1.6	0.4	2.3
Industrial Production [1]	3.6	5.7	3.9	4.7	-0.2	-1.7	2.3	3.1	2.8	1.9	3.7	1.8	3.0
Corporate Profits Before Taxes [2]	-3.6	1.2	5.8	3.4	4.6	4.3	4.6	4.9	10.0	2.0	1.7	4.6	5.4
Trade Weighted Dollar Index [3]	76.9	75.9	81.3	85.1	92.1	89.9	91.0	92.3	73.5	75.9	78.5	91.3	95.3
Unemployment Rate	6.6	6.2	6.1	5.7	5.6	5.4	5.3	5.2	8.1	7.4	6.2	5.4	5.0
Housing Starts [4]	0.93	0.98	1.03	1.06	0.98	1.14	1.19	1.25	0.78	0.92	1.00	1.11	1.25
Quarter-End Interest Rates [5]													
Federal Funds Target Rate	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.75	0.25	0.25	0.25	0.44	1.44
Conventional Mortgage Rate	4.34	4.16	4.16	3.86	3.77	3.98	4.15	4.23	3.66	3.98	4.17	4.03	4.51
10 Year Note	2.73	2.53	2.52	2.17	1.94	2.35	2.41	2.49	1.80	2.35	2.54	2.30	2.73

Forecast as of: July 31, 2015
[1] Compound Annual Growth Rate Quarter-over-Quarter
[2] Year-over-Year Percentage Change
[3] Federal Reserve Major Currency Index, 1973=100 - Quarter End
[4] Millions of Units
[5] Annual Numbers Represent Averages

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

Inside

U.S. Review

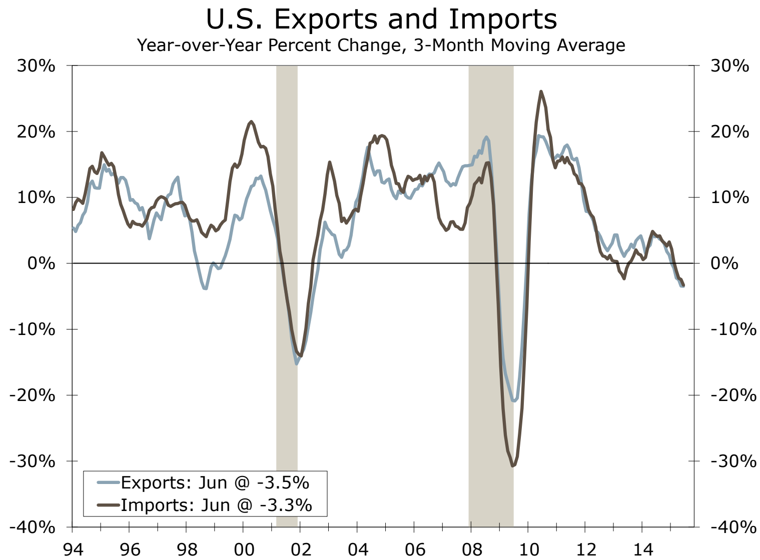
Commodity Prices and Dollar Can't Get Us Down

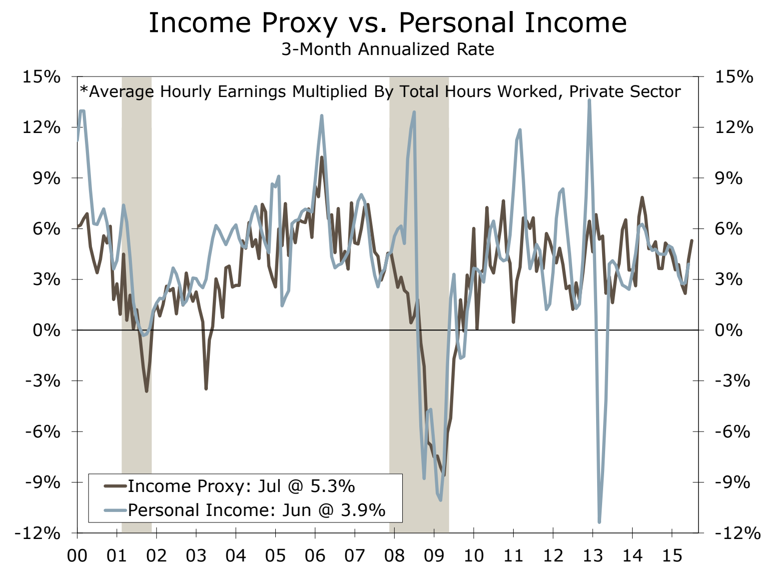
With further deterioration in oil and commodity prices coupled with the ongoing strength of the dollar, it is understandable for one to worry about future growth in the U.S. economy. After all, the negative effects of these developments are clearly evident in the data. Mining employment fell in July for the seventh straight month and what little weakness had been seen in the ISM Non-manufacturing Index emanated from this industry. Meanwhile the ISM Manufacturing Index softened in July, durable goods manufacturing employment fell again in the month, and factory orders were down on a year-over-year basis in June. In addition, weaker growth internationally has contributed to a second consecutive monthly decline in exports in June, causing the trade balance to widen considerably. Net exports are expected to take 0.6 percentage points off of real GDP growth for all of 2015.

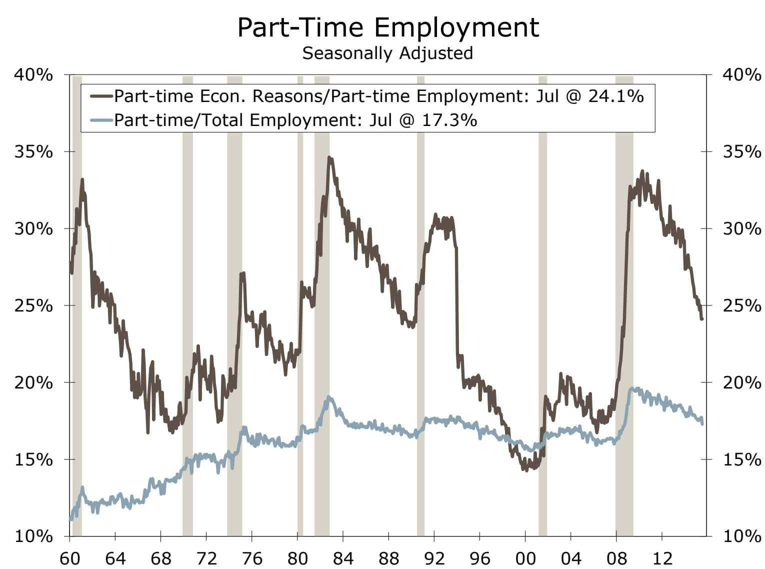
Although we expect these developments to exert a drag on overall output, focusing on these sectors alone would miss the broader growth story of the U.S. economy. Real disposable income is rising at a 3.0 percent year-ago pace, and although consumer spending fell flat in June, the year-ago trend is still running at a respectable 2.9 percent. Incomes seem to have received a modest boost early in the third quarter. Average hourly earnings rose 0.2 percent in July and the average workweek ticked up to 34.6 hours, which together lifted aggregate weekly earnings 0.5 percent in just one month. The rise in wages helps the Fed to justify a September rate hike after a disappointing read on the Employment Cost Index and the core PCE deflator remaining well below the Fed's 2.0 percent mandate. (See Interest Rate Watch for a more detailed analysis).

Employment has also forged ahead, adding 215,000 workers in July, keeping the average monthly net addition to payrolls firmly above 200,000 so far in 2015. Employment gains have recently been concentrated in the service sector, mainly retailers, professional & business services, healthcare and leisure & hospitality, but surprisingly, employment in nondurable goods manufacturing and oil & gas extraction both increased in the month as well. Although the unemployment rate was flat in the month, the underemployment rate (U-6) dropped to 10.4 percent. In addition, the number of workers who are part-time for economic reasons, a statistic Chair Yellen often cites, is declining at a fairly rapid pace now and adds to the growing evidence that the Fed will raise rates sooner rather than later.

One of the more notable improvements in data released this week came from the ISM Non-manufacturing Index, which jumped 4.3 points in July. Every subcomponent of the index except inventory sentiment increased in the month and each one remains above the break-even threshold of 50. Such a strong reading outside the factory sector points to the positive effects that lower oil prices and a stronger dollar can have on the economy. Consumers are the main beneficiaries as they enjoy savings at the gas pump and lower costs for imports, but businesses, particularly those with few international competitors, also benefit from these trends.







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

Retail Sales • Thursday

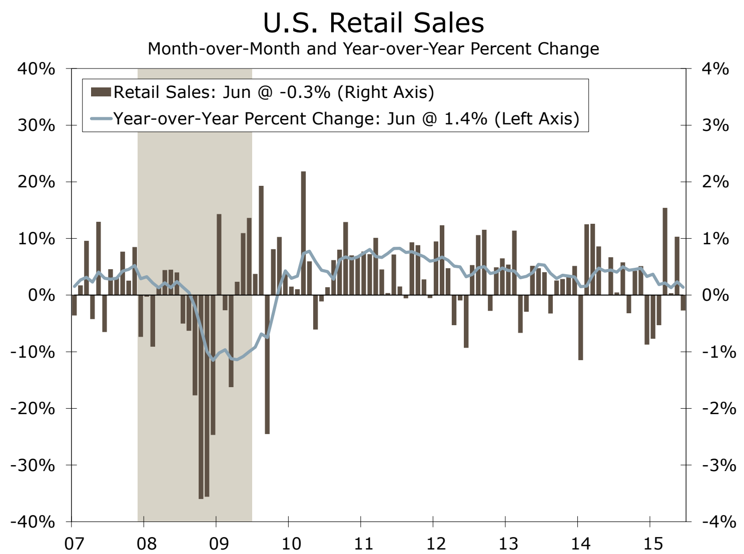
Retail sales disappointed in June, falling 0.3 percent. May's report, however, showed a stronger 1.0 percent gain. Much of June's weakness stemmed from the housing components. On a year-over-year basis, the index has risen 1.4 percent. Recall that retail sales data are reported on a nominal basis, and lower energy prices have weighed on the headline number. In fact, retail sales at gasoline stations have fallen 9.9 percent from a year ago.

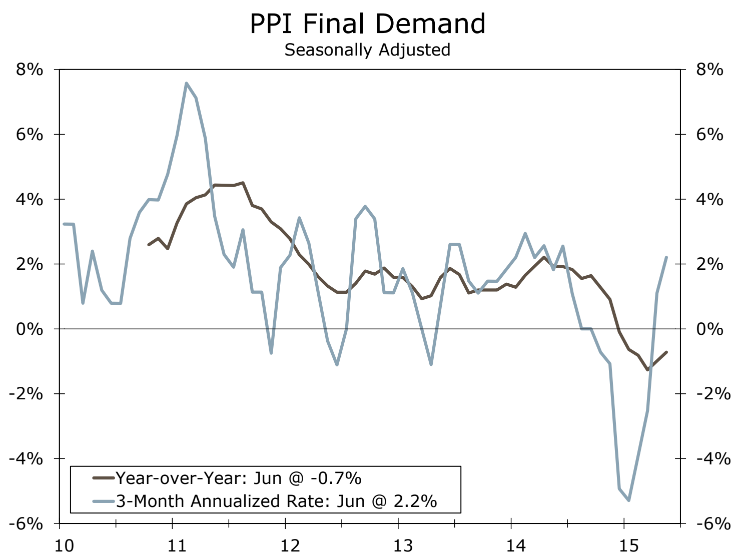
That said, the control group, which strips out some of the more volatile components, is up a slightly stronger 2.1 percent year over year. In addition, the three-month annualized rate is up an even stronger 3.4 percent, despite the 0.1 percent decline in June.

We expect that retail sales rose 0.5 percent in July. Consumer spending should strengthen in the second half. We look for real personal consumption to rise at a 3 percent annualized rate in H2.

Previous: -0.3% **Wells Fargo: 0.5%**

Consensus: 0.6% (Month-over-Month)





Producer Price Index • Friday

The Producer Price Index (PPI) accelerated to begin the summer, rising at a three-month annualized rate of 2.2 percent. This tops the 0.7 percent decline from a year ago. This acceleration comes as oil prices rose from March until June of this year. July, however, saw another decline in oil prices, which will likely weigh on the headline in July. We expect the Producer Price Index increased a modest 0.1 percent in July.

Dollar appreciation has also likely weighed on PPI inflation. A stronger dollar reduces import prices. In fact, the Import Price Index is also due to be released next week. Import prices have fallen 10.0 percent over the year and we are expecting another decline in July. The dollar, which had stabilized earlier this year, continued its ascent in July. We expect import prices declined 0.9 percent in July.

Previous: 0.4% **Wells Fargo: 0.1%**

Consensus: 0.1% (Month-over-Month)

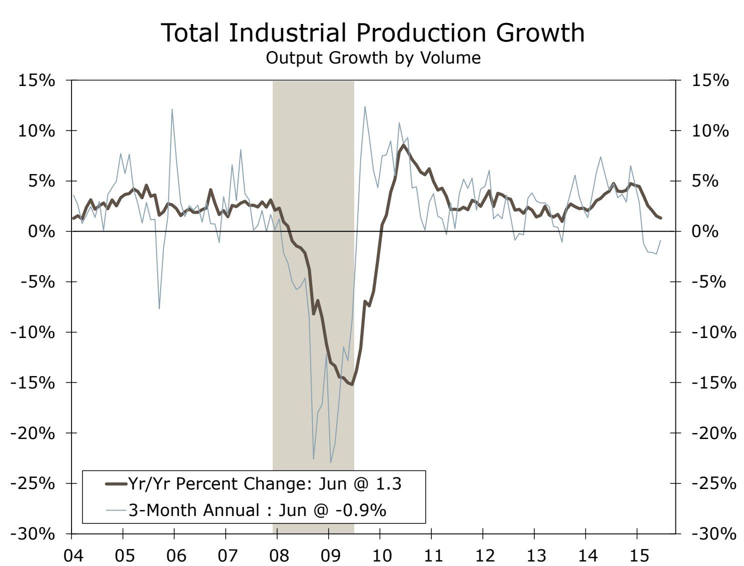
Industrial Production • Friday

Headline industrial production (IP) growth weakened over the first half of 2015. In addition, the Federal Reserve's annual revisions to industrial production and capacity utilization released in July showed growth was not as strong as initially reported. The manufacturing and utilities components were revised lower, although mining output was actually stronger than initially reported for much of the recovery. While this may sound like a positive, it also means that energy and mining was a larger part of the economy than initially thought, meaning the collapse in energy prices is even more painful. We look for industrial production to post a gain of 0.2 percent in July.

Capacity utilization was also revised lower. This suggests a slightly weaker business spending environment and lower inflationary pressures. In June, we expect that capacity utilization ticked up to 77.9 percent on the back of a decent pickup in output.

Previous: 0.2% **Wells Fargo: 0.2%**

Consensus: 0.3% (Month-over-Month)



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

Global Review

Eurozone GDP Continues to Expand, Albeit Modestly

Monthly economic data for June have given analysts a clearer idea of the state of the Eurozone economy during Q2. Specifically, industrial production rose at an annualized rate of 0.9 percent in Italy. However, IP was more or less flat in Germany, and it declined 1.5 percent in France. In short, the data in the three largest economies in the Eurozone indicate that IP growth in the overall euro area in Q2 will not come close to the 3.5 percent annualized rate that was registered in Q1.

That said, real GDP growth in the Eurozone likely remained positive in the second quarter as real retail spending in the overall euro area rose at an annualized rate of 1.4 percent on a sequential basis. Moreover, the positive momentum has likely carried over into the current quarter. As shown in the chart on the front page, the purchasing managers' indices (PMIs) in July remained above the demarcation line separating expansion from contraction. Despite the financial market volatility that was associated with the recent Greek debt crisis, economic activity in the Eurozone continues to expand, if only at a modest pace.

Rate Hikes in the United Kingdom on the Horizon?

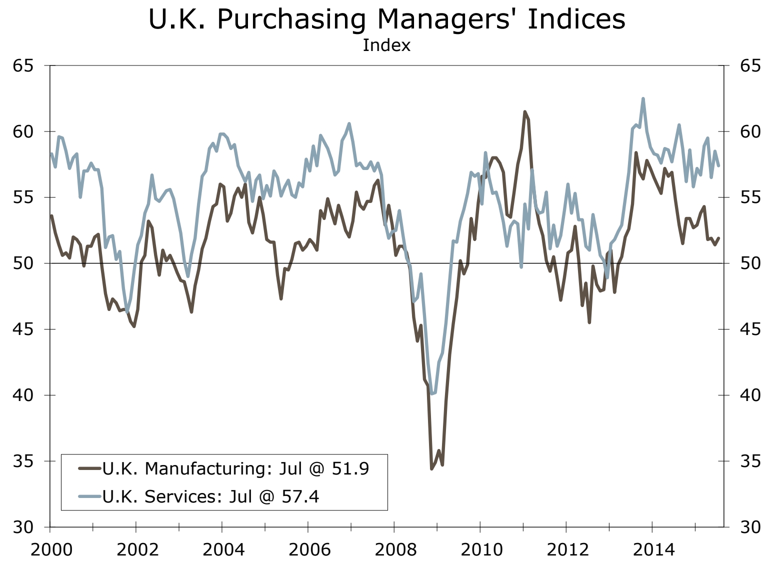
Data released last week showed that real GDP in the United Kingdom rose at a solid rate of 0.7 percent (not annualized) in the second quarter, and the PMIs remained well within expansion territory in July (top chart). Despite signs that the expansion remains solid, the Bank of England decided this week to keep its main policy rate on hold at 0.50 percent for the 76th consecutive month. However, one individual on the nine-member Monetary Policy Committee (MPC) voted this week for a 25-bp rate hike, the first time since January that the MPC was not unanimous in its decision to keep policy unchanged.

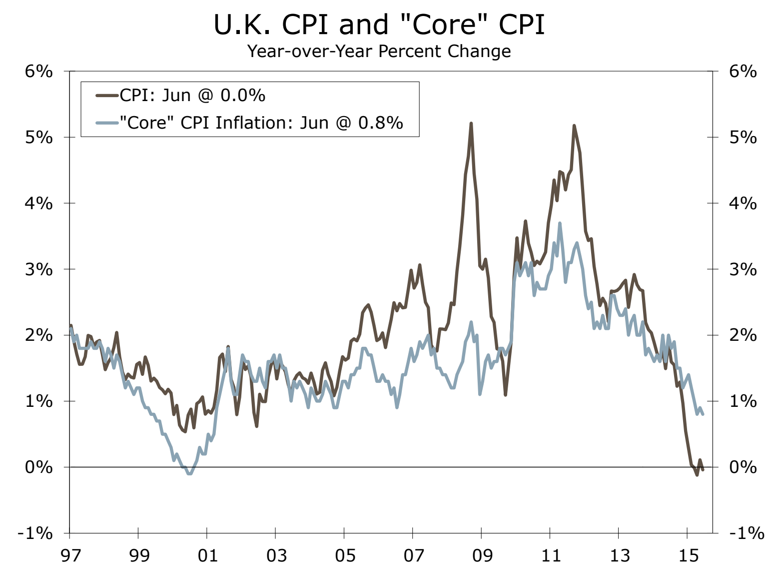
In its quarterly *Inflation Report* this week, the Bank of England acknowledged that "the near-term outlook for inflation is muted." Indeed, with the overall CPI unchanged on a year-over-year basis (middle chart), there is not much reason for the inflation-targeting Bank of England to be tightening its policy right now. If, as we expect, however, the overall rate of CPI inflation rebounds toward 1 percent later this year, then more MPC members could be persuaded early in 2016 that a modest pace of monetary tightening is appropriate.

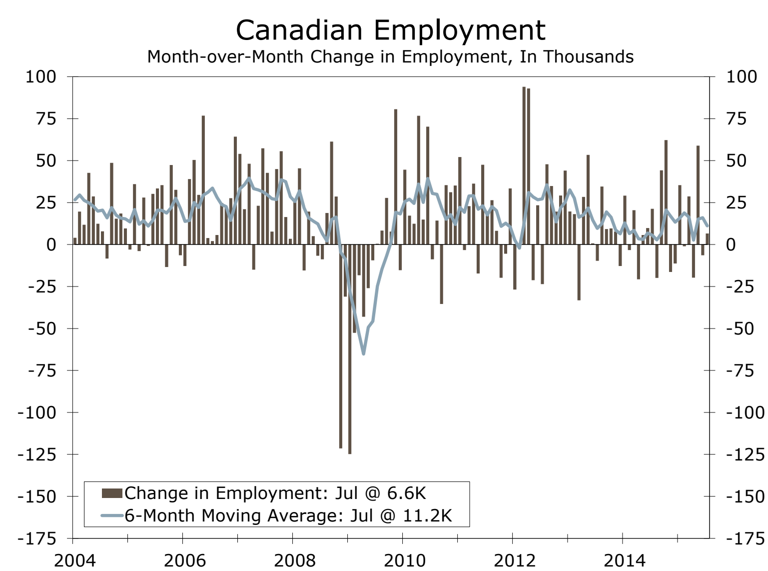
Growth in Canada Remains Weak

Real GDP in Canada contracted at an annualized rate of 0.6 percent in the first quarter, and recent monthly data suggest that GDP may have declined again in Q2. If so, then the Canadian economy has slipped back into a mild recession. It was this apparent weakness in economic growth that prompted the Bank of Canada to cut its policy rate by 25 bps last month.

Data released today showed that non-farm payrolls in Canada rose 6,600 in July, slightly above consensus, while the jobless rate remained at 6.8 percent (bottom chart). Smoothing through the monthly volatility shows that the pace of employment gains is sluggish at present. Although the Bank of Canada may not cut rates again, it is unlikely to raise its main policy rate anytime soon.







Source: IHS Global Insight and Wells Fargo Securities, LLC

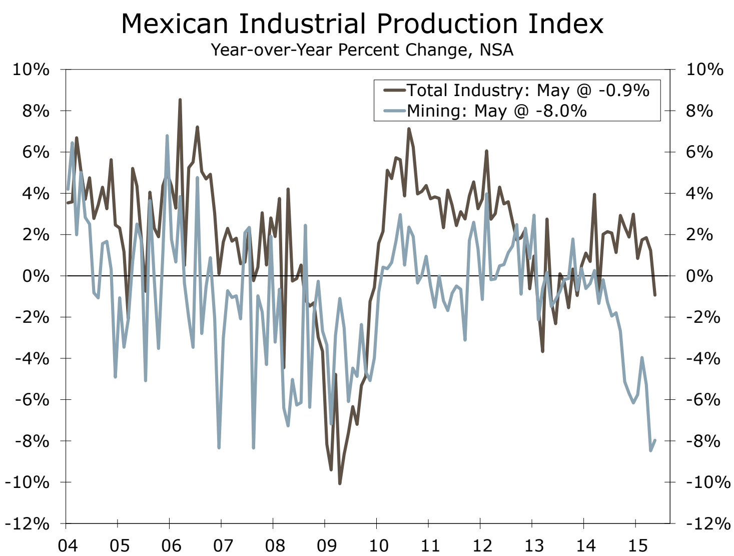
China Industrial Production • Tuesday

On Tuesday markets will be able to continue to gauge the extent of the weakness in the Chinese economy with the release of the industrial production index as well as retail sales. Markets still expect a further slowdown in the industrial production index, at 6.6 percent in July, year over year, compared to a reading of 6.8 percent in the previous month. If consensus is correct, then it will mark the first weakening in industrial production on a year-earlier basis since March of this year, which will not be a good sign for the Chinese economy or for the rest of the global economy. The fact that the manufacturing PMI weakened slightly, to 50.0, from 50.2 may have influenced the expectation on industrial production.

Retail sales, on the other hand, are expected to have remained stable in July on a year-over-year basis, according to consensus expectations, at 10.6 percent, probably showing that the domestic consumer market continues to remain stable.

Previous: 6.8%

Consensus: 6.6% (Year-over-Year)



Mexican Industrial Production • Tuesday

After a very weak reading for Mexican industrial production in May consensus is expecting the sector to have recovered somewhat in June. May's year over year industrial production index slowed down to only -0.9 percent from a 1.2 percent reading in April. Manufacturing production slowed down to only 0.8 percent a relatively strong reading of 4.0 percent in April. Consensus is expecting a reading of 0.9 percent for the June industrial production index motorized by a 3.1 percent recovery in manufacturing production, all on a year-earlier basis. The weak consensus expectation for the overall index means that markets are not positive on the performance of the mining sector, which has been dragging the overall index for a long time. The industrial production index is just a reflection of the weak economic stance of the Mexican economy even as the U.S. economy, the largest export market for Mexico, continues to recover.

Previous: -0.9%

Consensus: 1.0% (Year-over-Year)

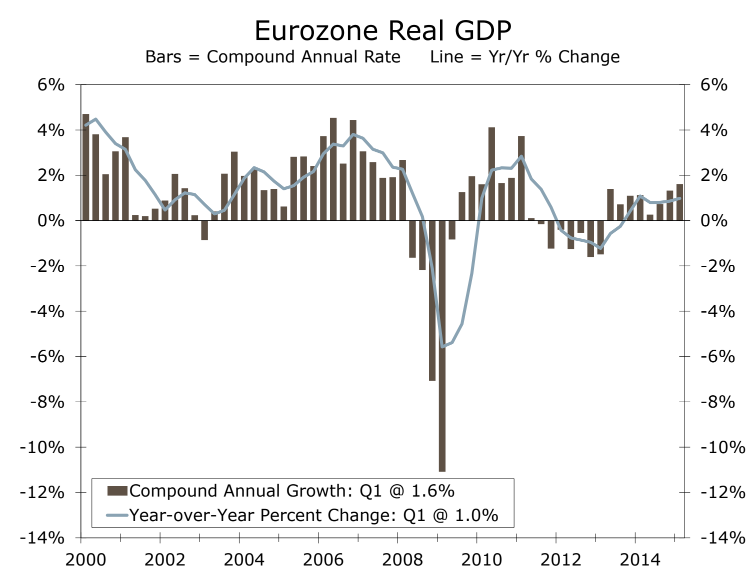
Eurozone Q2 GDP • Friday

Next week will be an important week for the Eurozone and Germany as we will get the first view at second quarter GDP for both. Markets expect the Eurozone to have grown 0.4 percent on a seasonally adjusted basis (not annualized) compared to the first quarter of the year, the same rate it grew during that quarter. Meanwhile, the estimate for Germany is a bit stronger, at 0.5 percent compared to a 0.3 percent reading for the first quarter of the year. On a year-over-year basis Germany is expected to have grown 1.5 percent compared to a 1.0 percent rate reported during the first quarter of the year.

Furthermore, earlier in the week, on Tuesday and Wednesday, we will get the ZEW expectation indices as well as the industrial production index for the Eurozone. On Friday, markets will get inflation readings for the Eurozone as well as the final reading for inflation in Germany.

Previous: 1.1%

Consensus: 1.3% (Year-over-Year)



Source: IHS Global Insight and Wells Fargo Securities, LLC

Interest Rate Watch

The Case for September Mounts

Markets have been skeptical that the Federal Open Market Committee (FOMC) will begin to raise interest rates this year amid soft inflation, sluggish global growth and ongoing weakness in the energy sector. Recently, however, markets are beginning to come around to the Fed's view that interest rates will increase before the end of the year. This week the market-implied probability of a rate rise in September jumped to 58 percent, up from just 40 percent last Friday and 23 percent a month ago (top chart).

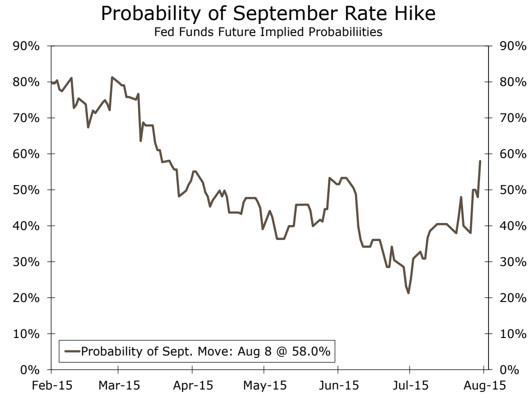
Moderate FOMC Members Speak Up

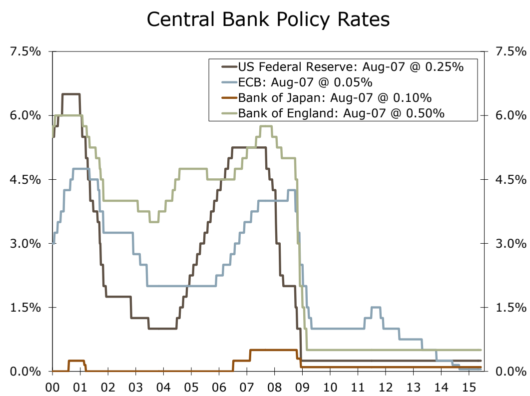
Why the shift? Atlanta Fed President Dennis Lockhart, a voter this year, provided unusually pointed comments for a Fed official surrounding the timing of liftoff later this year. With moderate views and a record of never dissenting, Lockhart could be regarded as a bellwether of FOMC sentiment. In an interview this week, he stated "there is a high bar right now to not acting, speaking for myself. It will take a significant deterioration in the economic picture for me to be disinclined to move ahead [in September]."

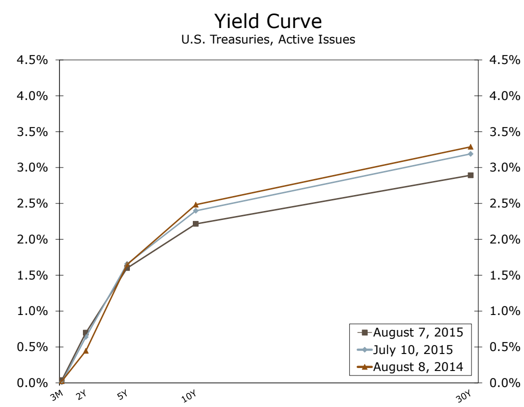
In public comments on Wednesday, Fed Governor Jay Powell indicated his view of a September liftoff was "close to a coin flip," but his "own forecast calls for liftoff in September." Lockhart and Powell stressed further progress in the labor market as an important factor that would determine whether the committee is likely to raise rates in September.

Today's employment report confirmed that the labor market continues to make strides. The 215,000 increase in payrolls is similar to the trend seen over the first half the year and signals no deterioration that would possibly give the FOMC pause in beginning to lift rates next month.

Also nudging the case that a data-dependent Fed would favor raising rates in September was the impressive ISM non-manufacturing report. While not directly linked to the Fed's mandates, the 10-year high in the index showed that the broad pace of activity in the U.S. economy remains strong.







Source: IHS Global Insight, Bloomberg LP and Wells Fargo Securities, LLC

Credit Market Insights

Bank Lending Recovery Continues

The July 2015 Senior Loan Officer Opinion Survey on Bank Lending Practices, which surveys banks for changes in lending standards, terms, and loan demand, showed that demand for loans either remained the same or improved across most forms of credit. Banks reported no change in lending standards for Commercial and Industrial Loans and Commercial Real Estate, with standards near or slightly easier than their longer-term averages. A modest net fraction of banks saw stronger demand for these types of loans.

On the household side, lending standards for residential mortgages continue to loosen from their historically tight levels. A moderate to large net fraction of banks reported stronger demand across most categories of home-purchase loans, signaling some momentum for the housing market. Lending standards for consumer loans were little changed over the past quarter, although demand strengthened slightly for credit card loans. Twenty-three percent of banks reported moderately stronger demand for auto loans over the past three months, highlighting the robust demand for new cars we have seen recently.

This survey reinforces the slow but steady recovery for consumer credit as households have repaired their balance sheets. As the Federal Reserve prepares for a potential rate hike this fall, it will be important to monitor the demand for loans in a rising rate environment.

Credit Market Data

Mortgage Rates	Current	Week Ago	4 Weeks Ago	Year Ago
30-Yr Fixed	3.91%	3.98%	4.09%	4.14%
15-Yr Fixed	3.13%	3.17%	3.25%	3.27%
5/1 ARM	2.95%	2.95%	2.96%	2.98%
1-Yr ARM	2.54%	2.52%	2.50%	2.35%
Bank Lending	**Current Assets (Billions)**	**1-Week Change (SAAR)**	**4-Week Change (SAAR)**	**Year-Ago Change**
Commercial & Industrial	$1,902.7	-2.48%	6.44%	12.06%
Revolving Home Equity	$446.6	-4.20%	-4.49%	-3.74%
Residential Mortgages	$1,617.8	32.36%	2.19%	1.96%
Commerical Real Estate	$1,702.7	17.94%	15.22%	8.90%
Consumer	$1,230.1	11.13%	6.39%	4.24%

Source: Freddie Mac, Federal Reserve Board and Wells Fargo Securities, LLC

Topic of the Week

What Caused the Taper Tantrum?

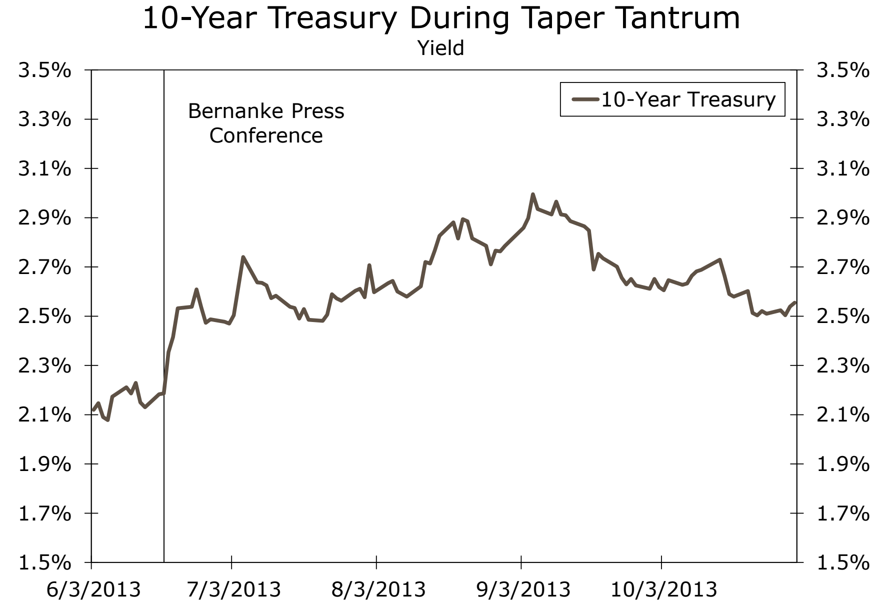
In the press conference following the June 2013 Federal Open Market Committee (FOMC) meeting, Chairman Bernanke suggested it would be appropriate to begin "tapering" the third round of quantitative easing (QE) later that year. This was news to financial markets, sparking a large selloff in fixed-income assets (top graph). We will investigate the lessons learned and their implications for interest rates in the rest of 2015.

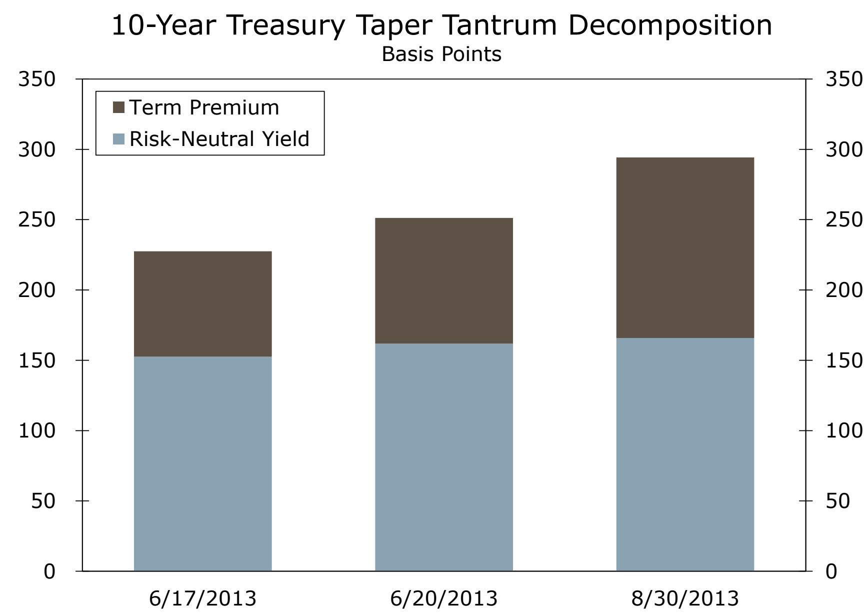
Looking at a decomposition of the yield curve into the risk-neutral yield (expected yield from rolling over short-term Treasury bills) and the term premium (compensation for risk that the short-term rate may not evolve as expected), we see that the majority of the increase in yields was driven by the term premium.

One of the goals of QE was to depress term premiums. Short- and long-term bonds are not perfect substitutes for one another and investors demand a term premium to hold longer-maturity bonds. Therefore, the term premium is determined by supply and demand for the longer-term bonds, and an earlier-than-anticipated ending of QE may have reduced expected demand for the securities, causing the term premium to increase.

Will Term Premiums Spike Again?

There is uncertainty about whether we will experience another "taper tantrum" scenario when the FOMC raises its policy rate for the first time this cycle. We believe the current low-term premiums are a result of supply and demand dynamics and should not be largely affected by an increase in the policy rate. The Fed's balance sheet is still at an extraordinary level, contributing to the limited supply of longer-term bonds. Investors must, therefore, accept a lower premium to hold these bonds. In addition, higher capital requirements have increased demand for Treasuries by financial institutions. Pending a large revision in expected, which is a real possibility if market expectations jump to the Fed's projections, we should not see a repeat of the "taper tantrum," although we still expect yields to rise.





Source: Federal Reserve Board, Federal Reserve Bank of New York and Wells Fargo Securities, LLC

Subscription Info

Wells Fargo's *Weekly Economic & Financial Commentary* is distributed to subscribers each Friday afternoon by e-mail.

To subscribe please visit: www.wellsfargo.com/economicsemail

The *Weekly Economic & Financial Commentary* is available via the Internet at www.wellsfargo.com/economics

Via The Bloomberg Professional Service at WFRE.

And for those with permission at www.wellsfargoresearch.com

Market Data ♦ Mid-Day Friday

U.S. Interest Rates

	Friday 8/7/2015	1 Week Ago	1 Year Ago
3-Month T-Bill	0.06	0.06	0.02
3-Month LIBOR	0.31	0.31	0.23
1-Year Treasury	0.43	0.43	0.16
2-Year Treasury	0.72	0.66	0.43
5-Year Treasury	1.59	1.53	1.60
10-Year Treasury	2.18	2.18	2.41
30-Year Treasury	2.84	2.91	3.22
Bond Buyer Index	3.75	3.75	4.31

Foreign Exchange Rates

	Friday 8/7/2015	1 Week Ago	1 Year Ago
Euro ($/€)	1.096	1.098	1.336
British Pound ($/£)	1.548	1.562	1.683
British Pound (£/€)	0.708	0.703	0.794
Japanese Yen (¥/$)	124.240	123.890	102.100
Canadian Dollar (C$/$)	1.314	1.309	1.093
Swiss Franc (CHF/$)	0.982	0.966	0.909
Australian Dollar (US$/A$)	0.740	0.731	0.927
Mexican Peso (MXN/$)	16.185	16.109	13.280
Chinese Yuan (CNY/$)	6.210	6.210	6.161
Indian Rupee (INR/$)	63.815	64.136	61.233
Brazilian Real (BRL/$)	3.510	3.421	2.295
U.S. Dollar Index	97.633	97.336	81.524

Foreign Interest Rates

	Friday 8/7/2015	1 Week Ago	1 Year Ago
3-Month Euro LIBOR	-0.02	-0.02	0.17
3-Month Sterling LIBOR	0.59	0.58	0.56
3-Month Canada Banker's Acceptance	0.75	0.75	1.27
3-Month Yen LIBOR	0.10	0.10	0.13
2-Year German	-0.26	-0.23	0.01
2-Year U.K.	0.59	0.57	0.78
2-Year Canadian	0.45	0.41	1.07
2-Year Japanese	0.01	0.01	0.07
10-Year German	0.66	0.64	1.06
10-Year U.K.	1.85	1.88	2.48
10-Year Canadian	1.43	1.44	2.07
10-Year Japanese	0.42	0.42	0.53

Commodity Prices

	Friday 8/7/2015	1 Week Ago	1 Year Ago
WTI Crude ($/Barrel)	44.18	47.12	97.34
Gold ($/Ounce)	1094.41	1095.82	1312.62
Hot-Rolled Steel ($/S.Ton)	467.00	478.00	675.00
Copper (¢/Pound)	233.15	236.35	317.60
Soybeans ($/Bushel)	9.95	10.00	12.21
Natural Gas ($/MMBTU)	2.78	2.72	3.88
Nickel ($/Metric Ton)	10,808	10,978	18,653
CRB Spot Inds.	445.89	448.64	530.69

Source: Bloomberg LP and Wells Fargo Securities, LLC

Next Week's Economic Calendar

	Monday 10	Tuesday 11	Wednesday 12	Thursday 13	Friday 14
U.S. Data		**Nonfarm Productivity** Q1 -3.1% Q2 2.0% (W) **Unit Labor Costs** Q1 6.7% Q2 -1.0%(W)	**JOLTS** May 5363 June 5290 (C)	**Retail Sales** June -0.3% July 0.5% (W) **Import Prices (YoY)** June -10.0% July -10.6% (W)	**Industrial Production (MoM)** June 0.3% July 0.2% (W) **PPI (MoM)** June 0.4% July 0.1% (W)
Global Data		**China** **Industrial Production (YoY)** Previous (June) 6.8% **Mexico** **Industrial Production (YoY)** Previous (May) -0.9%			**Eurozone** **GDP (YoY)** Previous (Q1) 0.8%

Note: (W) = Wells Fargo Estimate (C) = Consensus Estimate

Source: Bloomberg LP and Wells Fargo Securities, LLC

Wells Fargo Securities, LLC Economics Group

Diane Schumaker-Krieg	Global Head of Research, Economics & Strategy	(704) 410-1801 (212) 214-5070	diane.schumaker@wellsfargo.com
John E. Silvia, Ph.D.	Chief Economist	(704) 410-3275	john.silvia@wellsfargo.com
Mark Vitner	Senior Economist	(704) 410-3277	mark.vitner@wellsfargo.com
Jay H. Bryson, Ph.D.	Global Economist	(704) 410-3274	jay.bryson@wellsfargo.com
Sam Bullard	Senior Economist	(704) 410-3280	sam.bullard@wellsfargo.com
Nick Bennenbroek	Currency Strategist	(212) 214-5636	nicholas.bennenbroek@wellsfargo.com
Eugenio J. Alemán, Ph.D.	Senior Economist	(704) 410-3273	eugenio.j.aleman@wellsfargo.com
Anika R. Khan	Senior Economist	(704) 410-3271	anika.khan@wellsfargo.com
Azhar Iqbal	Econometrician	(704) 410-3270	azhar.iqbal@wellsfargo.com
Tim Quinlan	Economist	(704) 410-3283	tim.quinlan@wellsfargo.com
Eric Viloria, CFA	Currency Strategist	(212) 214-5637	eric.viloria@wellsfargo.com
Sarah House	Economist	(704) 410-3282	sarah.house@wellsfargo.com
Michael A. Brown	Economist	(704) 410-3278	michael.a.brown@wellsfargo.com
Michael T. Wolf	Economist	(704) 410-3286	michael.t.wolf@wellsfargo.com
Erik Nelson	Economic Analyst	(704) 410-3267	erik.f.nelson@wellsfargo.com
Alex Moehring	Economic Analyst	(704) 410-3247	alex.v.moehring@wellsfargo.com
Misa Batcheller	Economic Analyst	(704) 410-3060	misa.n.batcheller@wellsfargo.com
Michael Pugliese	Economic Analyst	(704) 410-3156	michael.d.pugliese@wellsfargo.com
Donna LaFleur	Executive Assistant	(704) 410-3279	donna.lafleur@wellsfargo.com
Cyndi Burris	Senior Admin. Assistant	(704) 410-3272	cyndi.burris@wellsfargo.com

WELLS FARGO SECURITIES