September 18, 2015

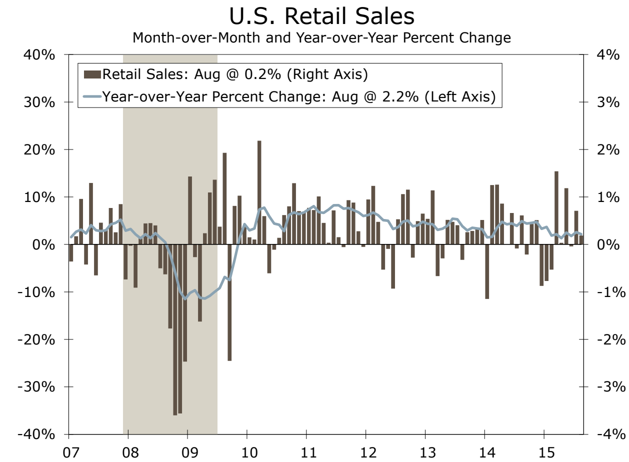
Economics Group

Weekly Economic & Financial Commentary

U.S. Review

Failure to Launch

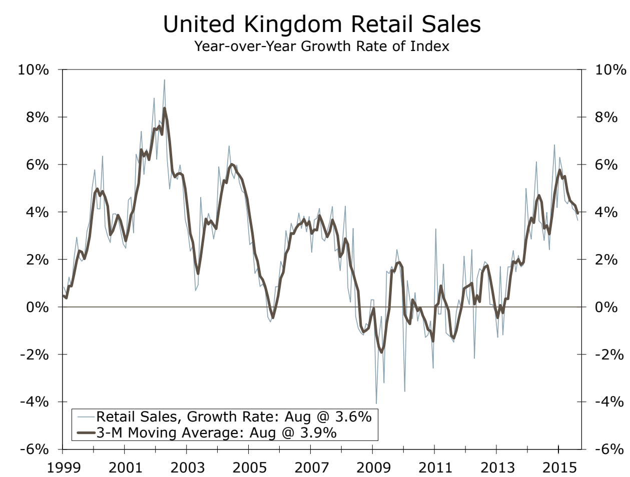
- The Federal Reserve left the federal funds target rate unchanged at its September FOMC meeting, but lowered its forward guidance for the next few years and long term.
- Retail sales rose solidly during August, even though lower gasoline prices held down overall outlays.
- Industrial production weakened during August, and both the New York Fed and Philadelphia Fed manufacturing surveys weakened further in September.
- Housing starts fell in August but builder confidence rose to a cycle high in September, which suggests the recovery remains intact.



Global Review

U.K. Growth Continues, BoJ on Hold, Chinese I.P. Slows

- Our expectation is that the U.K. economy, which is not overly exposed to economic developments in developing countries, will continue to expand. With CPI inflation still well-below its 2.0 percent target, we also suspect the Bank of England will not need to raise rates until well into 2016. Developments this week showed that retail sales increased in August and inflation remains benign.
- In Asia this week, Chinese industrial production figures came in a shade weaker-than-expected, and the Bank of Japan opted to leave the pace of it asset purchases unchanged.



Wells Fargo U.S. Economic Forecast

	Actual 2015				Forecast 2016				Actual		Forecast		
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	2013	2014	2015	2016	2017
Real Gross Domestic Product [1]	0.6	3.7	1.8	2.7	2.6	2.8	2.8	2.6	1.5	2.4	2.4	2.6	2.4
Personal Consumption	1.8	3.1	2.9	3.0	2.5	2.6	2.5	2.3	1.7	2.7	3.0	2.7	2.2
Inflation Indicators [2]													
PCE Deflator	0.2	0.2	0.4	0.9	1.8	1.7	1.9	1.9	1.4	1.4	0.4	1.8	2.0
Consumer Price Index	-0.1	0.0	0.2	0.8	2.1	1.9	2.0	2.2	1.5	1.6	0.3	2.0	2.2
Industrial Production [1]	-0.3	-2.6	2.2	2.2	3.5	3.7	3.5	3.5	1.9	3.7	1.5	2.7	3.4
Corporate Profits Before Taxes [2]	4.6	-0.5	5.8	6.8	6.5	7.2	5.0	5.8	2.0	1.7	4.2	6.1	5.5
Trade Weighted Dollar Index [3]	92.1	89.9	92.0	93.0	94.0	95.3	96.5	97.8	75.9	78.5	91.7	95.9	99.1
Unemployment Rate	5.6	5.4	5.2	5.0	4.9	4.8	4.7	4.6	7.4	6.2	5.3	4.8	4.5
Housing Starts [4]	0.98	1.16	1.17	1.22	1.24	1.24	1.25	1.26	0.92	1.00	1.14	1.25	1.35
Quarter-End Interest Rates [5]													
Federal Funds Target Rate	0.25	0.25	0.25	0.50	0.75	1.00	1.25	1.50	0.25	0.25	0.31	1.13	2.13
Conventional Mortgage Rate	3.77	3.98	4.00	4.15	4.23	4.28	4.37	4.63	3.98	4.17	3.98	4.38	4.82
10 Year Note	1.94	2.35	2.20	2.40	2.49	2.53	2.63	2.77	2.35	2.54	2.22	2.61	2.92

Forecast as of: September 18, 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

Dippin' Dots

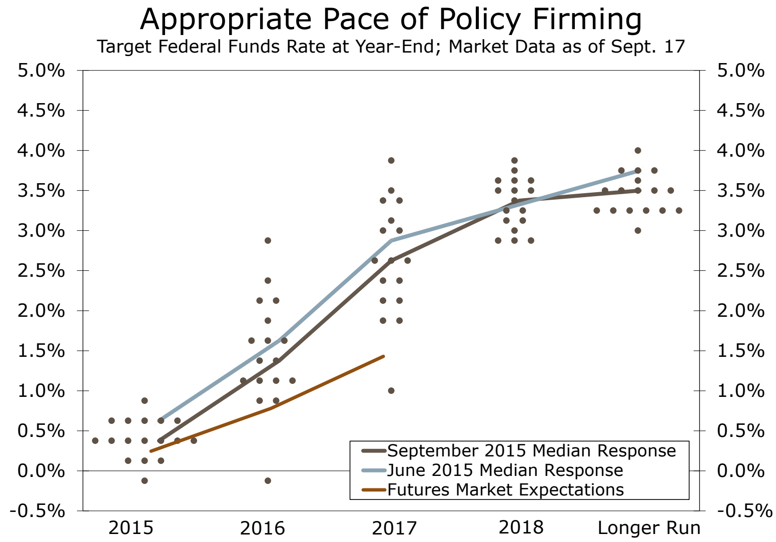
The Federal Reserve determined that the economy has not healed enough to warrant a quarter-point rate hike. The Fed not only left interest rates unchanged, but also lowered its expectations for the appropriated federal funds rate for the end of 2015, 2016, 2017 and over the long run. One dot even fell into negative territory for 2015 and 2016, although Janet Yellen noted that there was no serious discussion at the FOMC meeting of reducing the federal funds rate into negative territory.

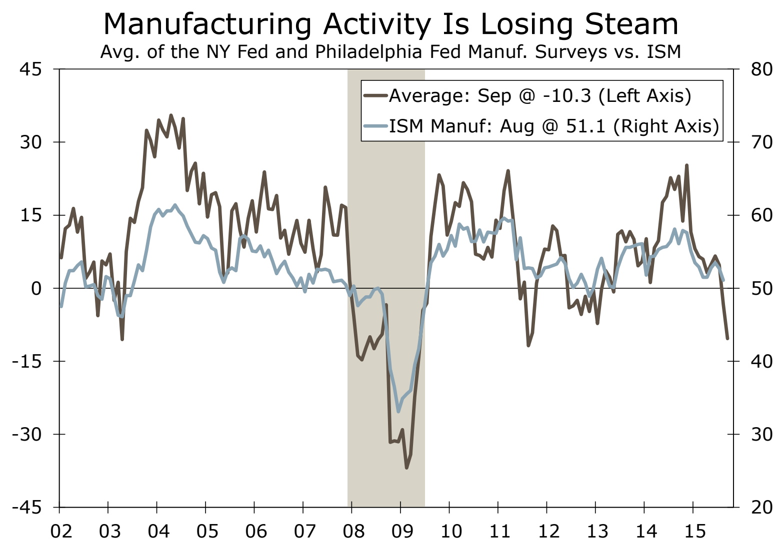
Reduced forward guidance is in essence an ease and will make it somewhat more difficult for the Federal Reserve to raise interest rates later this year. That said, 13 of the 17 Federal Reserve Bank presidents and Board Governors stated that they expect at least one quarter point hike before the end of the year. Our forecast continues to state that there will be no more than one quarter point interest rate hike this year and the window for that hike may be narrower than widely thought.

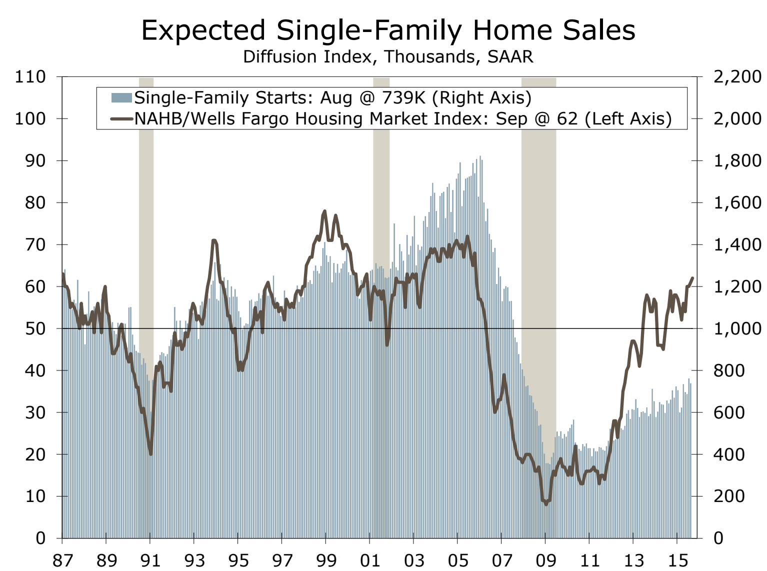
This week's economic reports were, for the most part, disappointing. Data on the production side of the economy are the most worrisome. Industrial production fell 0.4 percent in August, with most of the decline occurring in motor vehicles. Excluding motor vehicles, industrial production was unchanged during the month. The weak industrial production data are not an aberration. Overall industrial production has risen just once since December and output excluding motor vehicles is only marginally stronger having increased just three times this year.

More recent data are even more concerning. The Federal Reserve Bank of New York's Empire State Manufacturing Survey and the Philadelphia Fed's Manufacturing Survey both came in well below expectations in September. There has been a tendency to discount the usefulness of these two surveys, but our research has shown that an average of the two does provide a credible heads up on future moves in the ISM manufacturing index. The latest readings are discouraging and hint that Janet Yellen's concerns about the economic slowdown in China, the emerging markets and global economy in general, may be much more immediate and legitimate than the markets realize. The ISM has already fallen from the mid 50s to just 51.1. A further decline to 50 or less would take the index to levels more consistent with the start of an easing cycle in monetary policy than a tightening cycle.

There was some good news this week. Retail sales came in largely in line with expectations, with the headline number rising 0.2 percent and sales excluding motor vehicles, gasoline, building materials and food rose 0.4 percent. That is hardly a ringing endorsement about the strength of the U.S. economy, but should be enough to keep consumer spending growing, particularly since the Consumer Price Index fell in August and prices excluding food and energy items rose just 0.1 percent. The other bit of good news is that home builders continue to see strong sales and prospective buyer traffic. The Wells Fargo/NAHB Home Builders Index rose to its highest level since October 2005, indicating that this past month's slight drop in housing starts does not signal any threat to the housing recovery.







Source: NAHB, U.S. Dept. Commerce, ISM, Federal Reserve Board, Bloomberg LP and Wells Fargo Securities, LLC.

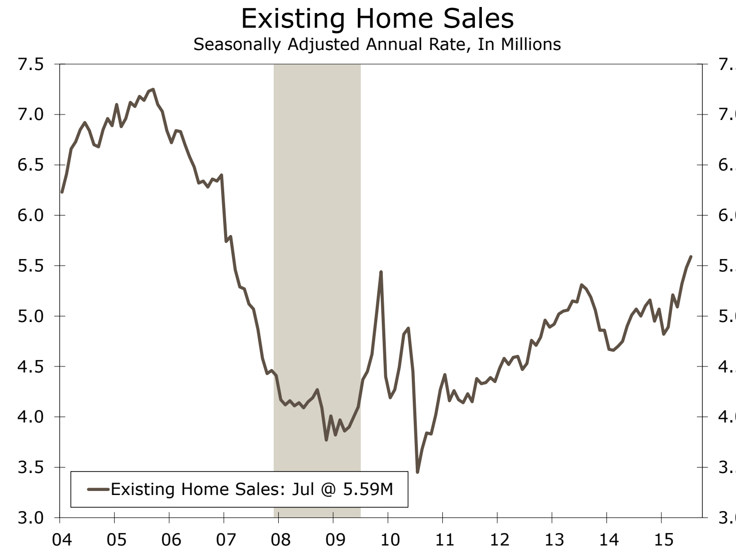
Existing Home Sales • Monday

After stumbling in mid-2013, the housing recovery is clearly back on track. Existing home sales rose to a cycle high of 5.59 million annualized units in July. More traditional buyers are stepping into the market, with the share of all cash and investor purchases down over the past year. That said, first-time buyers have continued to account for a historically low share of sales.

Some moderation in sales looks to be ahead. The pending home sales index, which leads existing home sales by a couple of months, has eased since the spring. In addition, mortgage applications for purchases have come down a bit since June. We look for existing home sales in August to have slowed, but for sales to move further ahead in the coming months as the labor market strengthens further and mortgage credit is finally easing.

Previous: 5.59M **Wells Fargo: 5.50M**

Consensus: 5.50M



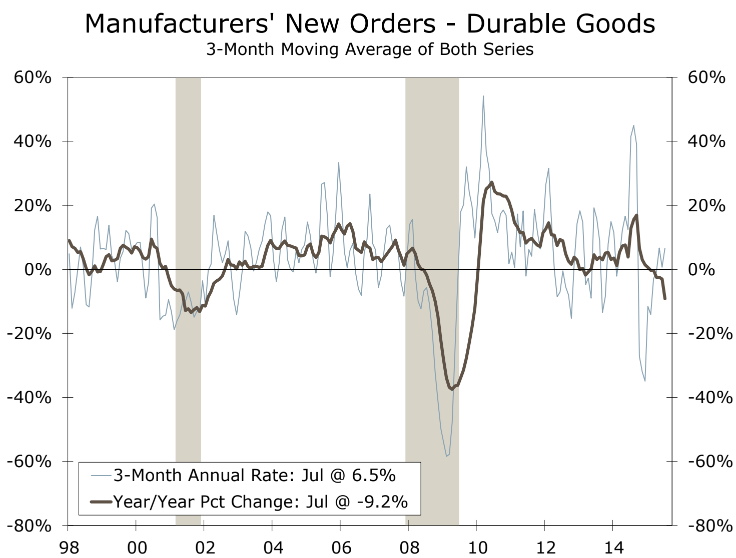
Durable Goods • Thursday

Durable goods orders have gained some momentum over the past few months after a rough start to the year. Orders rose 2.2 percent in July, with core capital goods orders, which exclude aircraft and defense, posting a solid 2.1 percent increase.

We expect orders fell back in August by around 2.3 percent. Part of last month's strong print stemmed from a 4.0 percent rise in orders for motor vehicles and parts, which were boosted on a seasonally-adjusted basis by fewer and shorter summer shutdowns. The reverse of these effects—a smaller-than-usual rise in August—will likely weigh on the headline. In addition, Boeing orders fell by almost half over the month. Ex-transportation, orders likely slowed as purchasing managers' indices for August indicated a tougher environment for orders last month.

Previous: 2.2% **Wells Fargo: -2.3%**

Consensus: -2.1% (Month-over-Month)

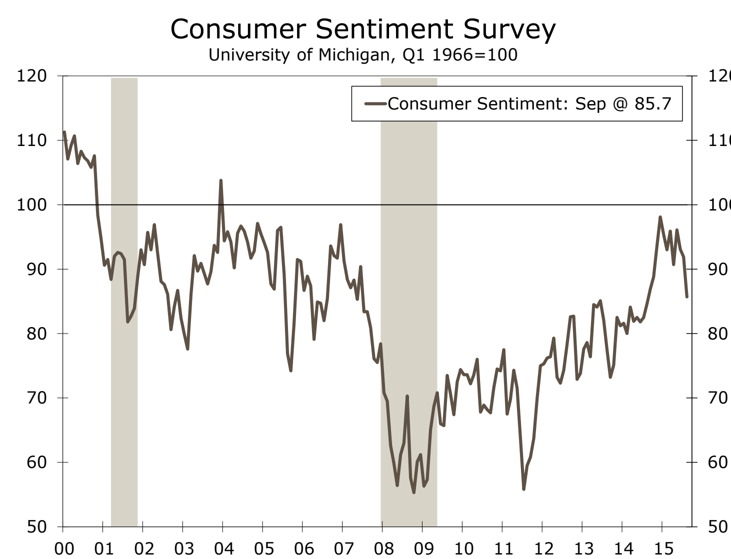


Consumer Sentiment • Friday

The final reading of the September University of Michigan Consumer Sentiment Index will be released next week. The preliminary reading showed confidence eroding from August (85.7 from 91.9), which most likely reflected the late-August drop in equity markets and subsequent market volatility. With the stock market heading higher since the preliminary September reading, the final reading for the month might show a more modest drop than initially reported. In addition to equity markets, consumer sentiment can be influenced by gasoline prices, which are highly visible. Gas prices have fallen more steeply in recent weeks and are down almost 30 percent over the past year, which should help consumers feel better about how far their paycheck is stretching.

Previous: 85.7

Consensus: 87.0



Source: NAR, U.S. Dept. of Commerce, Univ. of Michigan, Bloomberg LP and Wells Fargo Securities, LLC

Global Review

Tepid U.K. Inflation Means No Rush to Hike for BoE

Real GDP has been expanding in the United Kingdom for the past two and a half years. The expansion has been driven primarily by steady growth in domestic demand, and the U.K. economy is not particularly exposed to the developing economies of the world.

We learned this week that momentum in the domestic economy continued in the summer as the August retail sales report showed a 0.2 percent month-over-month increase, which put the year-over-year rate of retail sales growth at 3.7 percent. Excluding autos, sales figures were a tad weaker up just 0.1 percent on the month and 3.5 percent year over year.

Consumer fundamentals remain solid in the United Kingdom with strong income growth and smaller outlays on fuel freeing up demand for discretionary purchases. We look for continued growth in consumer spending as a driver of growth in coming quarters.

Like many foreign central banks, the Bank of England (BoE) has kept rates low, but we expect it to begin raising rates in 2016. Key to that decision is the outlook for CPI inflation. This week brought the latest read on that front, and with the year-over-year rate of CPI inflation at 0.0 percent in August, the BoE does not need to rush to raise rates. Like inflation in many other parts of the world, the headline rate is being pushed lower by the decline in oil and commodity prices. Core inflation in the United Kingdom slowed to 1.0 percent in August, from 1.2 percent in the prior month. We expect CPI inflation to trend higher in coming months as the drop in oil prices becomes less of a factor.

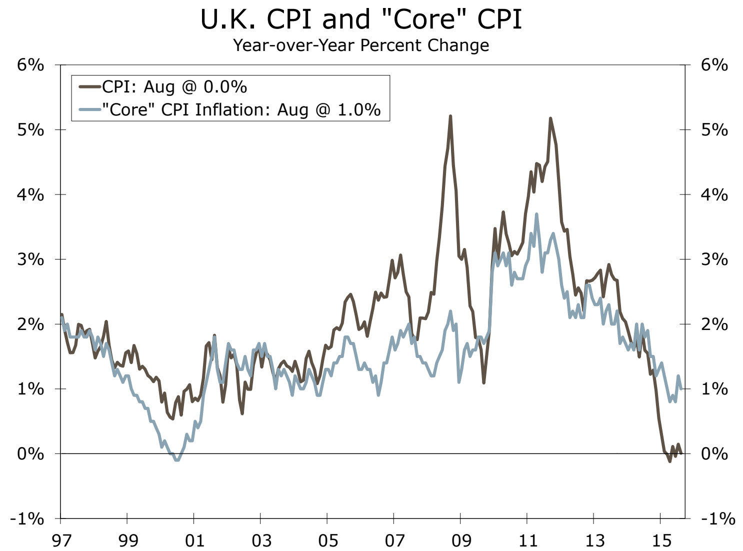
Bank of Japan: No Change For Now

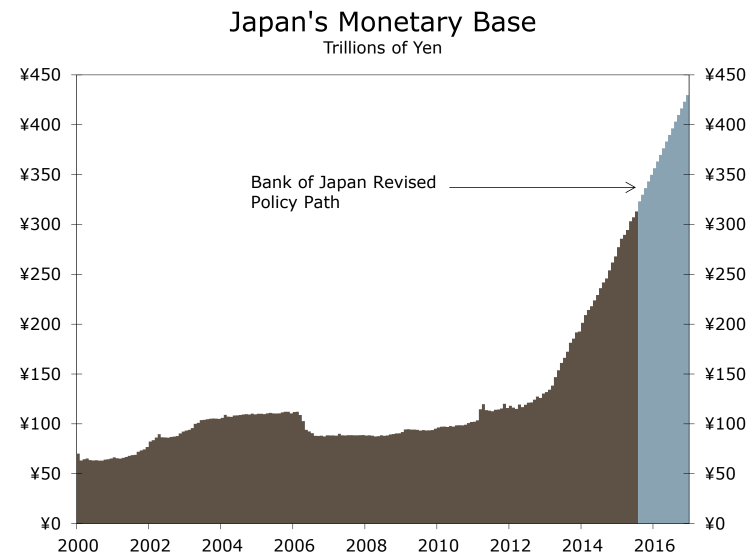
Since April 2013, the Bank of Japan (BoJ) has been expanding its monetary base in a bid to stimulate economic growth and to drive consumer prices higher. After GDP figures fell for two consecutive quarters last year, the BoJ responded by picking up the pace of its asset purchases to ¥80 trillion annually.

Real Japanese GDP growth contracted at an annualized rate of 1.2 percent in the second quarter and headline CPI in Japan is barely positive at 0.2 percent. With the economy struggling, and inflation well below the BoJ's 2.0 percent target, some market-watchers are beginning to wonder whether or not the BoJ will again increase the pace of its quantitative easing. The next meeting takes place on Oct. 30, one year after (almost to the day) of its announcement last year that put it on the current pace of easing.

Chinese Industrial Production

The bad news on economic developments out of China did not let up this week. We learned that industrial production increased just 6.1 percent on a year-over-year basis in the month of August. While that was a bit stronger than the 6.0 percent growth rate in the prior month, it was short of consensus expectations for a more robust increase of 6.5 percent. A preliminary reading of manufacturing sentiment is due out next week and will offer some clues about the future direction of Chinese factory output.





Source: IHS Global Insight and Wells Fargo Securities, LLC

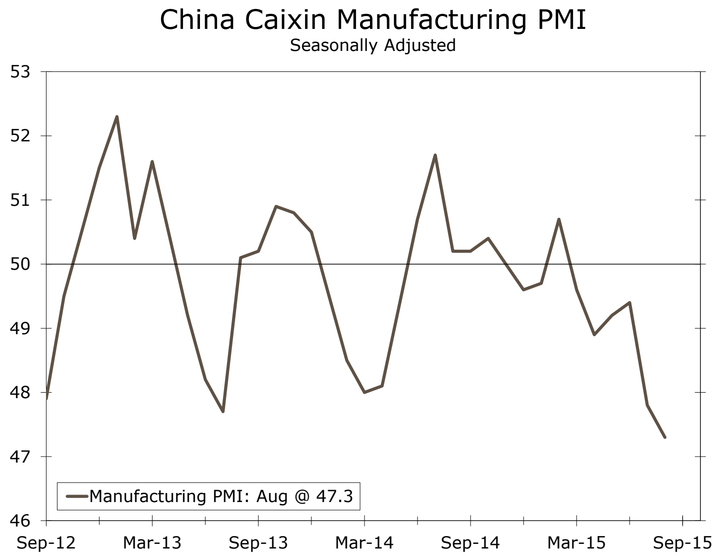
China Manufacturing PMI • Tuesday

Manufacturing activity across the global economy has continued to weaken and nowhere is this more true than in China. Last month, the Chinese manufacturing sector rocked the markets for its weakness and although consensus is not expecting the PMI manufacturing index to have deteriorated further, the prospects for the September reading are not very positive.

Manufacturing activity took a plunge in China in August with the Caixin manufacturing PMI dropping to 47.3, the lowest reading since at least 2012. Markets took notice of this weakness, reacting negatively to the news. Consensus is expecting a marginal increase, to 47.6, but still below the coveted "higher than 50" number. Thus, markets will be expectant early in the week to see if the current Chinese manufacturing weakness remains or if it has deteriorated further.

Previous: 47.3

Consensus: 47.6



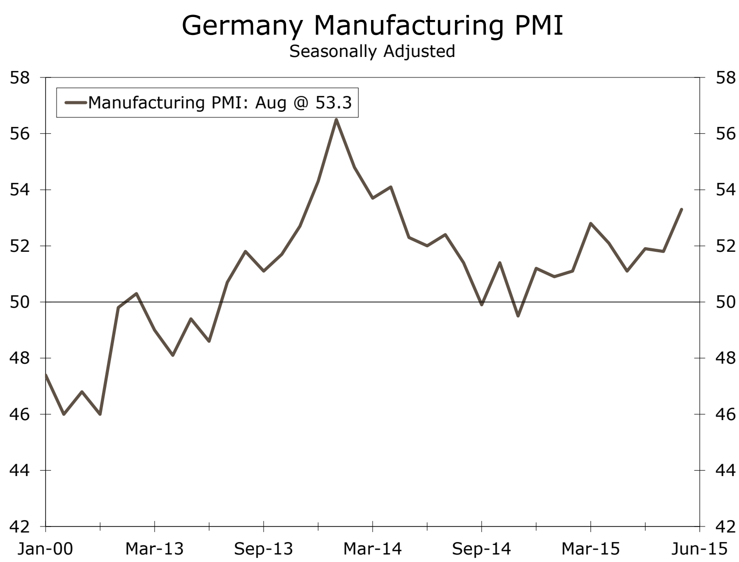
German Manufacturing PMI • Wednesday

Germany and the Eurozone are set to release manufacturing PMI numbers on Wednesday. Perhaps the good news over the past year is that these numbers have for the most part remained above the 50 demarcation point. In fact, Germany's 53.3 print for the index in August may be the first indication that the sector is improving. For that to be the case we need to see an improvement from that reading, which was the strongest reading since April 2014.

On Thursday, Germany will release its GfK consumer confidence index and the IFO business climate, current assessment, and expectations indices. The consumer confidence index weakened a bit in September, to 9.9, from 10.1 in August. Thus, an improvement will be reassuring for markets. Meanwhile, the IFO indices have remained positive but somewhat directionless. Thus, an improvement here will also be a positive for markets.

Previous: 53.3

Consensus: 52.8



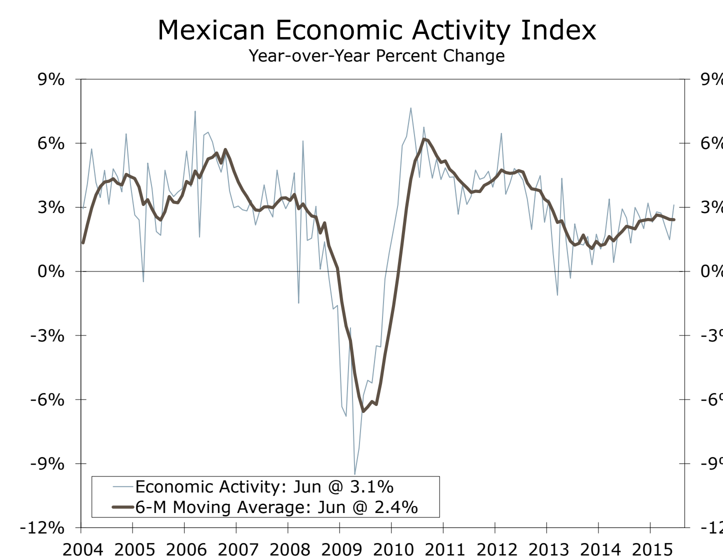
Mexico Economic Activity Index • Thursday

On Thursday, Mexico will release its economic activity index for July and markets should approach the release with low expectations if the industrial production index released last week is any indication of the state of the Mexican economy. Industrial production posted a non-seasonally adjusted 0.7 percent year-over-year increase, down from a 1.3 percent rate in June.

The slowdown was motorized by the weak performance of the manufacturing sector, which grew only 1.3 percent in July, year-over-year, compared to a 4.2 percent rate for the twelve months ending in June. Thus, the weakness we have seen during the first half of the year will spill over into the third quarter of the year and the economic activity indicator for July should indicate this pattern. Perhaps the only thing that could overcome this industrial weakness will be a stronger than expected performance for the service sector.

Previous: 3.1% (Year-over-Year)

Consensus: 2.1%



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

Interest Rate Watch

FOMC Passes on September

No change in the benchmark fed funds rate was made at this week's Federal Open Market Committee (FOMC) meeting. However, the FOMC did lower its expectations for inflation (top graph) for this year as well as the next two years and economic growth in 2016 and 2017. For investors, this immediately raises a problem since this introduces a lower path of nominal GDP growth going forward which would be associated with a slower pace of profit growth over time.

Meanwhile, the FOMC also lowered its expectations for the federal funds rate over the same period (middle graph). These lower expectations were consistent with what we expected going into the meeting.

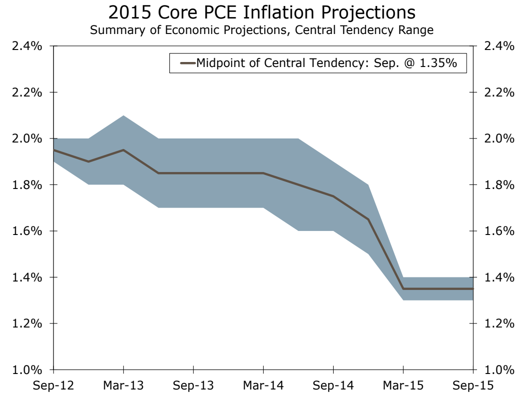
Global developments were brought into the discussion. These developments bring in another element of uncertainty. We believe that a resolution of the global picture is unlikely to provide much guidance in the short run. This simply adds to uncertainty given that the global situation has made a sudden appearance in the FOMC press release. These developments are difficult to quantify and unlikely to change much before the end of the year—yet a great majority of the FOMC expect to raise the funds rate by the end of the year? Uncertainty persists.

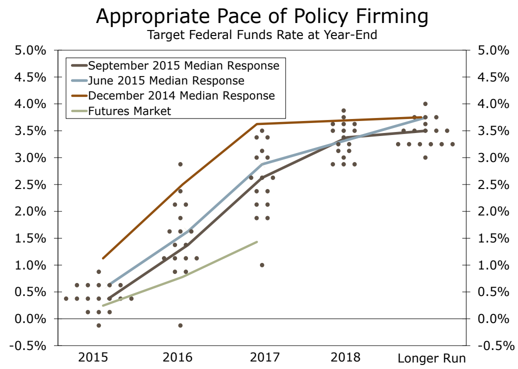
Inflation: Clearly a Breakdown in the Fed's Phillips Curve Model

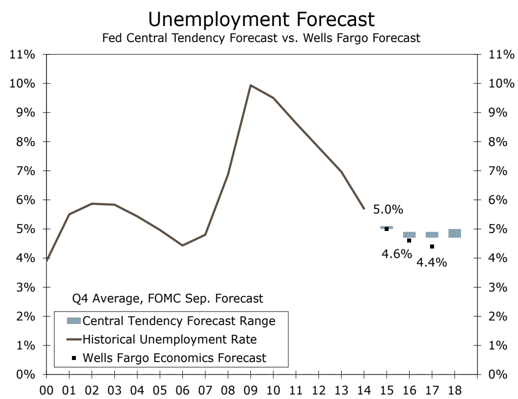
Lower expectations for both the unemployment rate and the inflation rate indicate that the Fed's Phillips Curve inflation approach is clearly out of date. There appears to be a breakdown of the traditional FOMC model of the labor market/inflation relationship. Moreover, as we have observed in many presentations, inflation, measured by the PCE deflator, has averaged slightly less than 2 percent since 1994. This brings into question the value of having a 2 percent target when 2 percent inflation has not been achieved for what could be considered the long run.

Another Breakdown: Rates & Growth

Over the last three years, the FOMC has consistently overestimated the path of the federal funds rate. Yet economic growth remains also below its expectations. This indicates that whatever the link is between the funds rate and economic growth, the link is weaker than the Fed's expectations.







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

Credit Market Insights

Mortgage Rates Remain Unbothered

Freddie Mac's *Mortgage Market Survey*, released earlier this week, showed the average 30-year fixed mortgage rate increasing modestly—just shy of 4 percent; however, the rate remains below its year-over-year average of 4.23 percent. Mortgage applications were down 7 percent from a week ago. The mortgage credit availability index (MCAI) released early this month, increased in eight of the past nine months indicating loosening credit standards. MCAI paired with low mortgage rates should help bolster homes sales.

With the Fed leaving rates unchanged at their latest meeting, does this change the outlook for the housing market? According to Chair Yellen at the press conference following the Sept. 16-17 FOMC meeting, housing is not the main driver of the economy but instead plays more of a "supporting role." Unchanged rates should help maintain the currently low mortgage rates, which should prove beneficial for prospective homebuyers, especially ones with lower to moderate income levels.

Regardless of when the Fed does decide to raise rates, more likely than not, it will be at a slower pace, which should keep rates relatively low. Despite the housing market being quite sensitive to mortgage rates, raising rates slowly in the future should not put too large of a burden on the average potential buyer given still historically low rates.

Credit Market Data

Mortgage Rates	Current	Week Ago	4 Weeks Ago	Year Ago
30-Yr Fixed	3.91%	3.90%	3.84%	4.23%
15-Yr Fixed	3.11%	3.10%	3.06%	3.37%
5/1 ARM	2.92%	2.91%	2.90%	3.06%
1-Yr ARM	2.56%	2.63%	2.62%	2.43%
Bank Lending	**Current Assets (Billions)**	**1-Week Change (SAAR)**	**4-Week Change (SAAR)**	**Year-Ago Change**
Commercial & Industrial	$1,915.2	-14.42%	11.24%	10.98%
Revolving Home Equity	$443.1	-1.33%	-6.65%	-3.98%
Residential Mortgages	$1,612.6	-11.12%	6.70%	2.09%
Commerical Real Estate	$1,719.2	6.67%	8.42%	9.10%
Consumer	$1,240.7	11.78%	5.96%	4.55%

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

Topic of the Week

Capex Is Not Particularly Sensitive to Fed Hikes

Even as the Fed opted to hold its fire on a rate increase this week, Fed Chair Janet Yellen went out of her way to articulate that a case could be made for raising interest rates now. While uncertainty remains about the timing of the first rate hike, the updated dot plot still conveys policy makers expectation that it will be raising rates over the next couple of years.

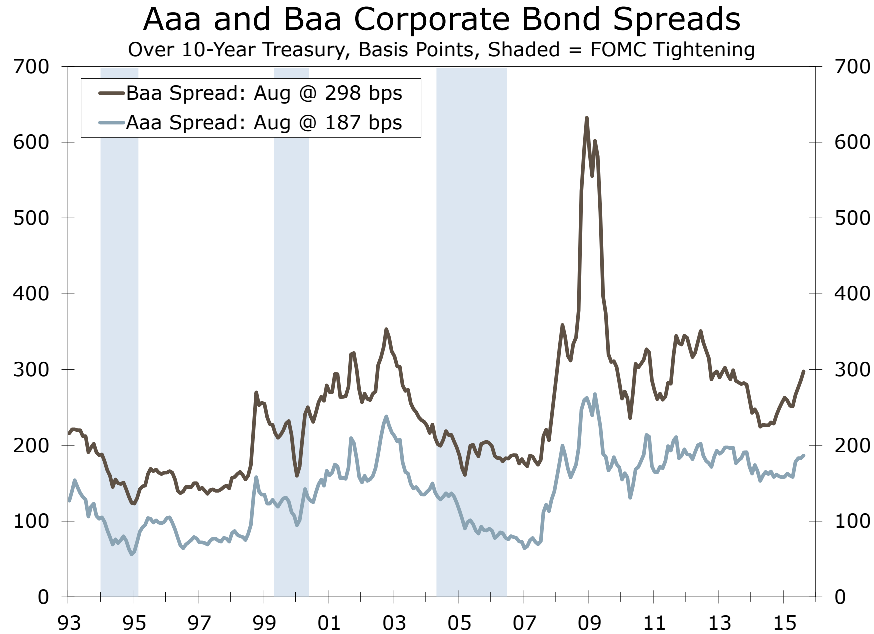
With that thought in mind, in a recent special report, we looked at what higher rates will mean for business spending, specifically for outlays on capital equipment.

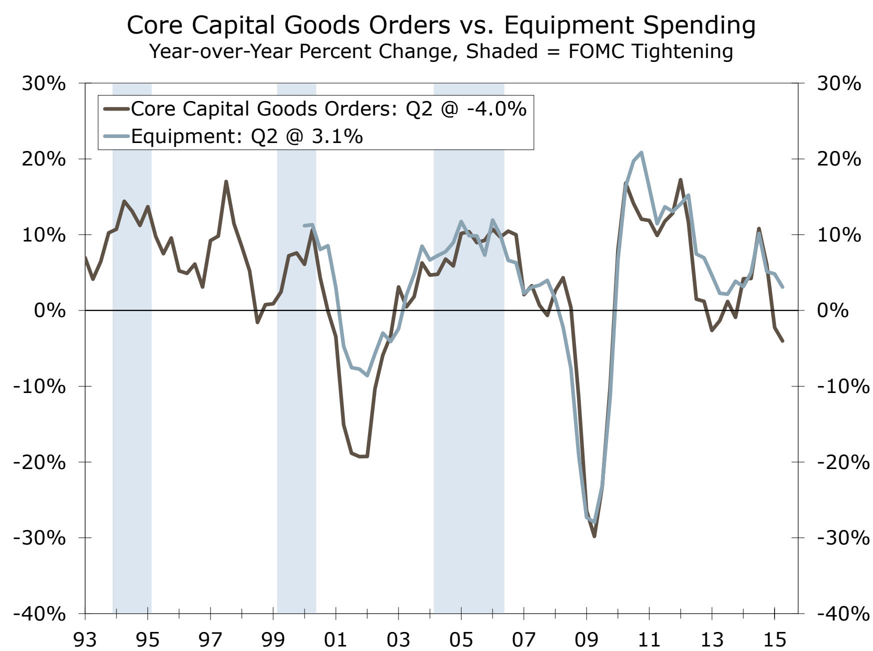
Conventional economic theory tells us the transmission of monetary policy for businesses is fairly straightforward: higher rates are bad for capex, lower rates are good. This thinking is qualified with ceteris paribus or "all else equal." But all else is not equal.

Firms seeking to fund new investment over the past 20 years have had a number of options, from traditional bank financing to public stock offerings and debt financing. The top chart at right looks at corporate bond spreads over the past three Fed tightening cycles (tightening cycles shaded blue). This graph clearly shows that Aaa and Baa corporate bond spreads have a tendency to narrow during periods of Fed tightening.

The bottom chart looks at the same time period, but now we have plotted equipment spending. We find that equipment spending growth holds up fine, and in some cases even increases during the past three periods of Fed tightening. That said, the recessions in 2001 and again in 2008-2009 hammered equipment outlays.

Our report also considers equipment spending in the context of a slower-than-usual economic expansion. Despite widely held views about the weakness of capex in recent years, capex spending in this cycle is actually the strongest of any expansion going back over the past 50 years when you look at equipment spending as a share of GDP. Our outlook for equipment spending remains modest, but that has to do with factors other than the Fed raising rates.





Source: U.S. Dept. of Commerce, Moody's Analytics 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 9/18/2015	1 Week Ago	1 Year Ago
3-Month T-Bill	-0.01	0.03	0.01
3-Month LIBOR	0.32	0.34	0.23
1-Year Treasury	0.44	0.46	0.14
2-Year Treasury	0.68	0.71	0.56
5-Year Treasury	1.46	1.51	1.83
10-Year Treasury	2.16	2.19	2.61
30-Year Treasury	2.96	2.95	3.35
Bond Buyer Index	3.78	3.82	4.17

Foreign Exchange Rates	Friday 9/18/2015	1 Week Ago	1 Year Ago
Euro ($/€)	1.137	1.134	1.292
British Pound ($/£)	1.558	1.543	1.640
British Pound (£/€)	0.730	0.735	0.788
Japanese Yen (¥/$)	119.850	120.590	108.690
Canadian Dollar (C$/$)	1.312	1.326	1.093
Swiss Franc (CHF/$)	0.961	0.969	0.934
Australian Dollar (US$/A$)	0.722	0.709	0.899
Mexican Peso (MXN/$)	16.531	16.839	13.237
Chinese Yuan (CNY/$)	6.364	6.375	6.141
Indian Rupee (INR/$)	65.674	66.541	60.845
Brazilian Real (BRL/$)	3.912	3.871	2.365
U.S. Dollar Index	94.745	95.194	84.323

Foreign Interest Rates	Friday 9/18/2015	1 Week Ago	1 Year Ago
3-Month Euro LIBOR	-0.04	-0.04	0.05
3-Month Sterling LIBOR	0.59	0.59	0.57
3-Month Canada Banker's Acceptance	0.77	0.75	1.27
3-Month Yen LIBOR	0.08	0.09	0.12
2-Year German	-0.23	-0.23	-0.06
2-Year U.K.	0.61	0.60	0.87
2-Year Canadian	0.47	0.46	1.17
2-Year Japanese	0.01	0.02	0.07
10-Year German	0.67	0.65	1.08
10-Year U.K.	1.84	1.83	2.58
10-Year Canadian	1.49	1.47	2.28
10-Year Japanese	0.31	0.35	0.57

Commodity Prices	Friday 9/18/2015	1 Week Ago	1 Year Ago
WTI Crude ($/Barrel)	45.41	44.63	93.07
Gold ($/Ounce)	1137.46	1107.78	1225.20
Hot-Rolled Steel ($/S.Ton)	449.50	449.50	655.00
Copper (¢/Pound)	239.55	246.20	309.25
Soybeans ($/Bushel)	8.77	8.72	10.53
Natural Gas ($/MMBTU)	2.63	2.69	3.91
Nickel ($/Metric Ton)	9,959	10,420	17,994
CRB Spot Inds.	441.64	444.71	517.90

Source: Bloomberg LP and Wells Fargo Securities, LLC

Next Week's Economic Calendar

	Monday 21	Tuesday 22	Wednesday 23	Thursday 24	Friday 25
U.S. Data	**Existing Homes Sales** July 5.59M August 5.50M (W)		**Durable Goods Orders** July 2.2% August -2.3% (W) **New Home Sales** July 507K August 512K (W)		**GDP (QoQ)** 2Q 2nd Revision 3.7% 2Q 3rd Revision 3.7% (W) **U. of Mich. Sentiment** August 91.9 September 87.0 (C)
Global Data		**China** **Caixin Manufacturing PMI** Previous (August) 47.3	**Germany** **Manufacturing PMI** Previous (August) 53.3	**Mexico** **Economic Activity Index** Previous (June) 3.1% **Japan** **National CPI (YoY)** Previous (August) 0.2%	

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
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