

# Economics Group

## Weekly Economic & Financial Commentary

### U.S. Review

#### Santa More Likely to Bring Rate Rise This December

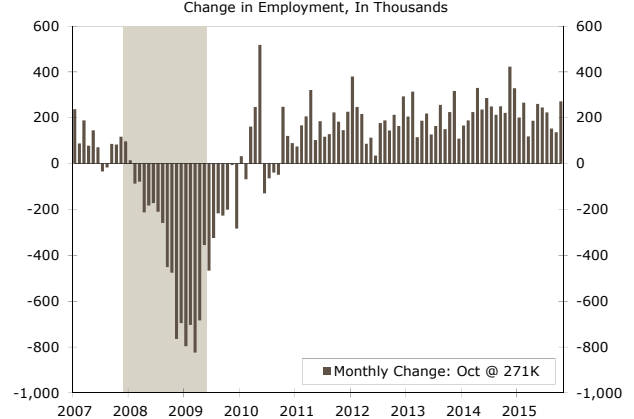
- Job growth came roaring back in October, with payrolls increasing 271,000. The unemployment rate edged down to 5.0 percent and average hourly earnings rose a solid 0.4 percent.
- The ISM reports for October showed further divergence in the path of the manufacturing and service sector. At 50.1, growth in the factory sector is essentially flat, while the ISM non-manufacturing index strengthened to 59.1.
- Auto sales in October registered an 18.1 million unit annual pace for a second consecutive month and are on pace for a record year in sales.

### Global Review

#### BoE to Remain on Hold for Some Time

- The Monetary Policy Committee (MPC) at the Bank of England kept its main policy rate on hold this week and hinted that it will refrain from raising rates for the foreseeable future. Although the domestic economy remains resilient, the MPC is concerned about the downside risks to growth and inflation from the external sector.
- With the Fed likely to raise rates at some point in coming months while the MPC remains on hold, our currency strategists look for the U.S. dollar to strengthen modestly vis-à-vis the British pound.

Nonfarm Employment Change



U.K. CPI and "Core" CPI



Wells Fargo U.S. Economic Forecast

	Actual				Forecast				Actual		Forecast		
	2015				2016				2013	2014	2015	2016	2017
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q					
Real Gross Domestic Product <sup>1</sup>	0.6	3.9	1.5	2.7	2.5	2.6	2.6	2.5	1.5	2.4	2.4	2.5	2.4
Personal Consumption	1.8	3.6	3.2	3.0	2.5	2.6	2.5	2.3	1.7	2.7	3.2	2.8	2.4
Inflation Indicators <sup>2</sup>													
PCE Deflator	0.2	0.3	0.3	0.5	1.4	1.3	1.5	1.9	1.4	1.4	0.3	1.5	2.0
Consumer Price Index	-0.1	0.0	0.1	0.5	1.7	1.5	1.7	2.1	1.5	1.6	0.1	1.8	2.2
Industrial Production <sup>1</sup>	-0.3	-2.4	1.9	1.2	2.7	2.5	3.0	3.5	1.9	3.7	1.5	2.1	3.3
Corporate Profits Before Taxes <sup>2</sup>	4.6	0.6	5.9	6.6	6.2	6.9	5.4	6.1	2.0	1.7	4.4	6.1	5.5
Trade Weighted Dollar Index <sup>3</sup>	92.1	89.9	92.3	91.8	92.8	94.0	95.3	96.5	75.9	78.5	91.5	94.6	98.1
Unemployment Rate	5.6	5.4	5.2	5.0	4.9	4.8	4.7	4.6	7.4	6.2	5.3	4.7	4.5
Housing Starts <sup>4</sup>	0.98	1.16	1.16	1.22	1.24	1.24	1.25	1.26	0.92	1.00	1.14	1.25	1.35
Quarter-End Interest Rates <sup>5</sup>													
Federal Funds Target Rate	0.25	0.25	0.25	0.50	0.50	0.75	1.00	1.25	0.25	0.25	0.31	0.88	1.81
Conventional Mortgage Rate	3.77	3.98	3.89	3.92	3.94	3.99	4.11	4.25	3.98	4.17	3.89	4.07	4.45
10 Year Note	1.94	2.35	2.06	2.08	2.10	2.15	2.25	2.37	2.35	2.54	2.11	2.22	2.52

Forecast as of: October 30, 2015

<sup>1</sup> Compound Annual Growth Rate Quarter-over-Quarter

<sup>2</sup> Year-over-Year Percentage Change

<sup>3</sup> Federal Reserve Major Currency Index, 1973=100 - Quarter End

<sup>4</sup> Millions of Units

<sup>5</sup> 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	2
U.S. Outlook	3
Global Review	4
Global Outlook	5
Point of View	6
Topic of the Week	7
Market Data	8

Together we'll go far



## U.S. Review

### Labor Market Back on Track

After two months of disappointing payroll reports that stoked fears that the labor market was stumbling, job growth came roaring back in October. Payrolls rose by 271,000, with strong gains in construction and the service sector. Looking through the recent volatility, the trend in payroll growth remains firm with jobs increasing an average of 187,000 over the past three months.

The labor market increasingly looks to be at full employment. The unemployment rate ticked down to 5.0 percent as household employment also rose strongly, and the participation rate remains unchanged. Wage pressures are also emerging. Average hourly earnings rose 0.4 percent, and while monthly moves can be noisy, the year-over-year change rose to 2.5 percent—the strongest 12 month gain since mid-2009. The solid details of today's report, particularly signs of wage pressures, adds significant support to the case for the Fed beginning to lift rates in December.

### The Manufacturing & Service Sector Divide Widens

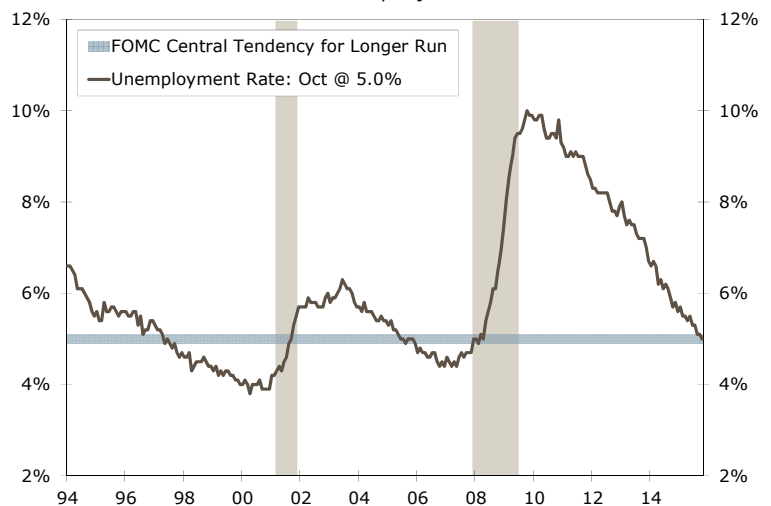
The manufacturing sector remained one spot of weakness in the report, with hiring flat. Activity in the factory sector has continued to struggle with the stronger dollar and sluggish global growth. Orders fell 1.0 percent in September, amid declines in both nondurable and core capex orders. Moreover, the ISM manufacturing index continues to teeter on the brink of expansion and contraction, with the index moving down a tick to 50.1 in October. The composition of the index, however, looked slightly more favorable. Although part of the lower reading reflected a decline in employment, the inventory component fell deeper into contraction territory in a sign firms continue to right-size stocks with a slower pace of demand. The new orders index rose nearly three points to 52.9, current production moved up 1.1 points also to 52.9 and supplier delivery times lengthened a touch.

Gauges of activity outside the factory sector, however, remain remarkably strong and add to the evidence that weakness in the industrial part of the economy is not derailing the expansion. Auto sales in October rose at an 18.1 million annualized rate for the second straight month and are on pace for a record year. Construction spending rose 0.6 percent in September and is up 14 percent over the past year. And, while we expect the trade deficit to widen over the coming months due to a relatively strong U.S. consumer and sluggish global growth, the trade deficit narrowed to the smallest gap in nearly a year in September.

The breadth of strength elsewhere in the economy was captured by the ISM non-manufacturing index jumping to 59.1 in October, the second strongest reading of the current expansion. Improvement was driven by a notable pickup in current activity and new orders, the latter of which suggests strength should continue at least through the next couple of months. Already at a high level in September, the employment index rose by nearly another point to a solid 59.2, consistent with the solid pace of hiring in the October jobs report.

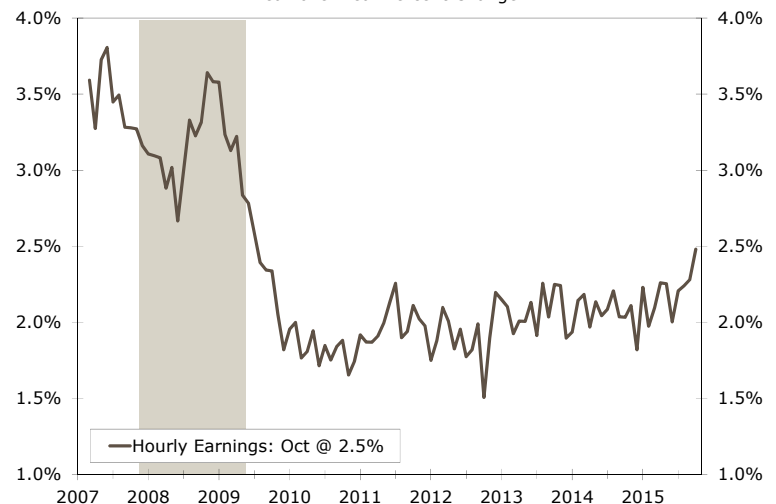
### Unemployment Rate

Seasonally Adjusted



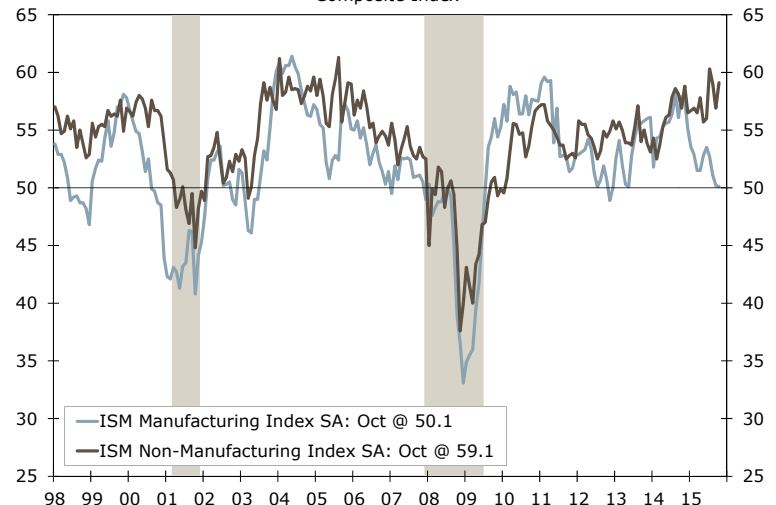
### Average Hourly Earnings

Year-over-Year Percent Change



### ISM Manufacturing & Non-Manufacturing

Composite Index



Source: U.S. Department of Labor, Institute for Supply Management, Federal Reserve and Wells Fargo Securities, LLC

## NFIB Small Business Optimism • Tuesday

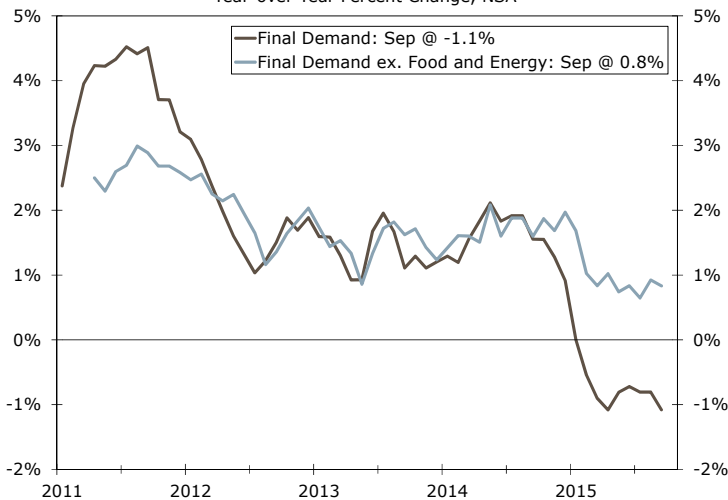
Small business owners remain cautiously optimistic as the National Federation of Independent Business' (NFIB) small business optimism index increased to 96.1 in September. The index has softened somewhat in 2015, with the net share of firms expecting the economy to improve remaining in negative territory as well those reporting improved profits and sales. Fears regarding the global economy and stronger dollar may be weighing on small business optimism.

Slower GDP growth in the third quarter may have also rattled small businesses to some extent. Despite the lower headline number, however, real final sales to domestic purchasers increased at a much stronger 3.2 percent annual rate in the third quarter, which reflects the relative strength of the domestic economy. Consensus expects that small business optimism increased to 96.3 in October.

**Previous: 96.1**

**Consensus: 96.3**

PPI and Core PPI Final Demand  
Year-over-Year Percent Change, NSA



## Retail Sales • Friday

Retail sales have generally pointed to improved consumer spending despite lower sales at gasoline stations weighing on the headline numbers. Recall retail sales reflect nominal spending, thus volatility in energy costs have played a large role recently. Looking at the control group, which excludes several volatile components, we can see that nominal spending has held relatively stable around 3 percent year over year and has accelerated in recent months.

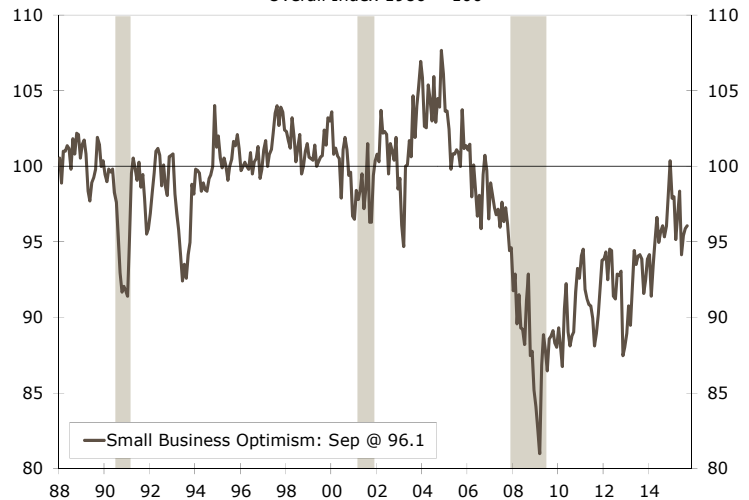
Incomes have held up relatively well and low energy prices have also likely begun to support real spending. We expect continued improvement in the labor market, which should support incomes and spending in the future. We forecast that retail sales ticked up 0.2 percent in October. Oil was more stable in October, meaning that it is unlikely to detract as much from the headline as we have seen in previous months.

**Previous: 0.1%**

**Wells Fargo: 0.2%**

**Consensus: 0.3% (Month-over-Month)**

NFIB Small Business Optimism  
Overall Index 1986 = 100



## Producer Price Index • Friday

Falling energy prices has been the biggest story for the headline producer price index (PPI), which fell a greater-than-expected 0.5 percent in September. This drop pulled the three-month annual rate sharply negative and kept the year-over-year rate in negative territory. Energy prices were more stable in October, which likely supported headline prices in the month.

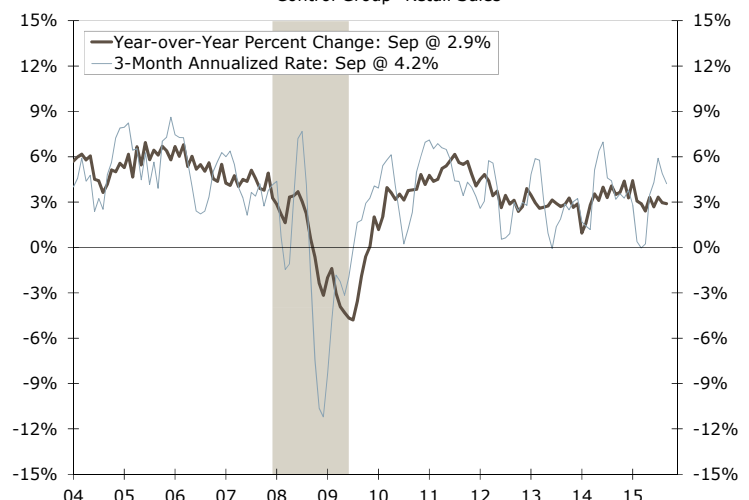
Despite the dramatic swings in the headline number, core PPI has softened as well. Broad-based declines in commodity prices have pulled down the goods index, while services have held up somewhat better. We expect the producer prices ticked up slightly in October. The import price index is also set to be released next week, and energy will likely weigh on the index once again. The dollar was weaker on balance in October, which may soften some of the impact of lower energy prices.

**Previous: -0.5%**

**Wells Fargo: 0.3%**

**Consensus: 0.1% (Month-over-Month)**

Retail Sales Ex-Food, Autos, Gas & Building Materials  
"Control Group" Retail Sales



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

## Global Review

### BoE to Remain on Hold for Some Time

Federal Reserve policymakers have been hinting lately that a rate hike at the December FOMC meeting is a very real possibility. In contrast, the Bank of England (BoE) clearly communicated this week that a rate hike in the United Kingdom is not in the offing anytime soon. For starters, the Monetary Policy Committee (MPC) voted 8-1 to keep its main policy rate unchanged at 0.50 percent.

Furthermore, the MPC noted in its policy statement that it expects the overall rate of CPI inflation to remain below 1 percent "until the second half of next year." As shown in the chart on the front page, the overall rate of inflation is currently -0.1 percent while the core rate of CPI inflation is only 1.0 percent at present.

As in most countries, the sharp drop in the year-over-year rate of CPI inflation in the United Kingdom reflects the collapse in oil prices that occurred at the end of last year. In a few months, the overall rate of inflation should rise as oil prices should be flat on a year-ago basis (assuming they do not move significantly lower from current levels in the interim). However, the low rate of core inflation means that the overall rate of CPI inflation should remain well below the MPC's 2 percent target for the foreseeable future. Indeed, the MPC does not expect overall CPI inflation to return to target for about two years or so.

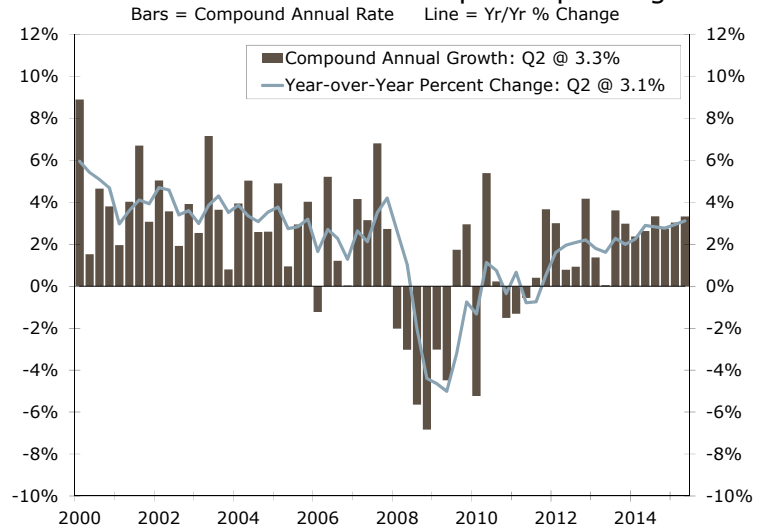
The MPC noted that "domestic momentum remains resilient." Indeed, real personal consumption expenditures are up more than 3 percent over the past year (top chart), and investment spending has also grown in excess of 3 percent over the same period. However, the MPC expressed concern about growth in the rest of the world, especially in developing economies.

Slow global growth has two effects on the British economy. First, it weighs on export growth, which helps to keep industrial production (IP) muted. In that regard, data released this week showed that IP dropped 0.2 percent in September relative to the previous month, leaving it only 1.1 percent higher on a year-ago basis (middle chart).

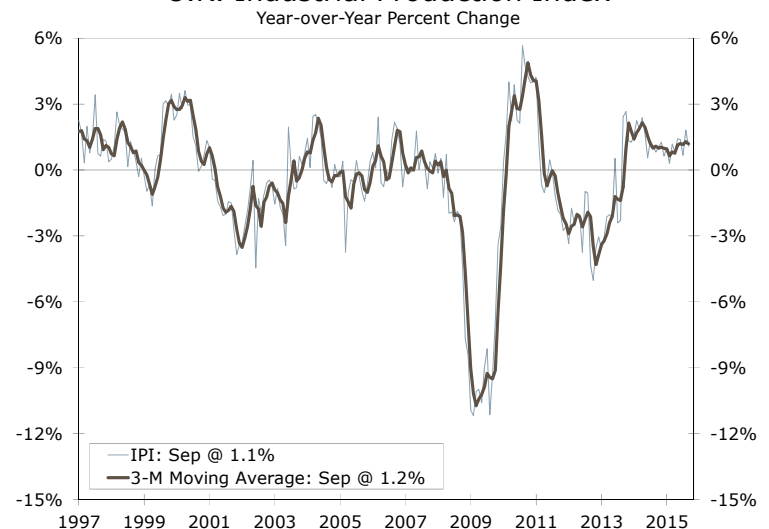
Second, sluggish global growth helps to pull commodity prices lower and, everything else equal, contributes to exchange rate appreciation in the United Kingdom. Indeed, the MPC explicitly noted the drop in commodity prices and sterling appreciation as two factors that have restrained the core rate of inflation. Although the British pound is down about 10 percent versus the U.S. dollar since July 2014, it has risen in excess of 10 percent vis-à-vis the euro over that time. On a trade-weighted basis, sterling is up 8 percent since the end of 2013 (bottom chart).

Stronger-than-expected data in coming months could clearly make the MPC change its collective mind. At this point, however, the MPC appears to be biased to remain on hold for the foreseeable future. With the Fed likely to raise rates at some point in coming months while the MPC remains on hold, our currency strategists look for the U.S. dollar to strengthen modestly vis-à-vis the British pound.

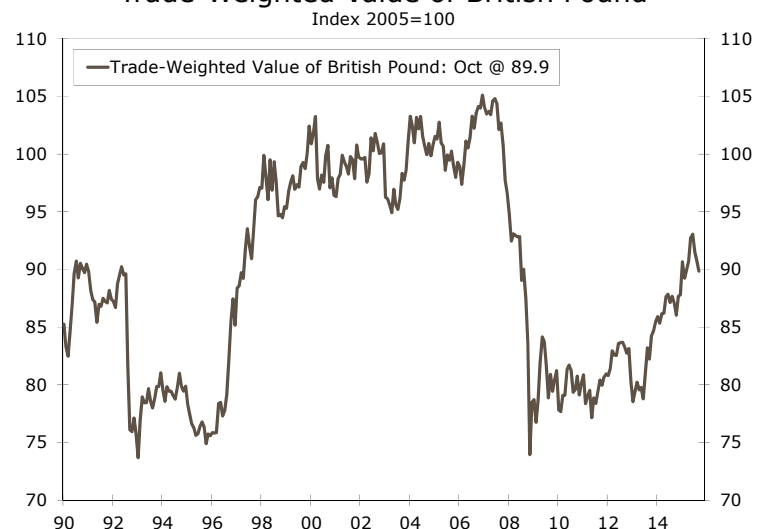
U.K. Real Personal Consumption Spending



U.K. Industrial Production Index



Trade-Weighted Value of British Pound



Source: IHS Global Insight and Wells Fargo Securities LLC

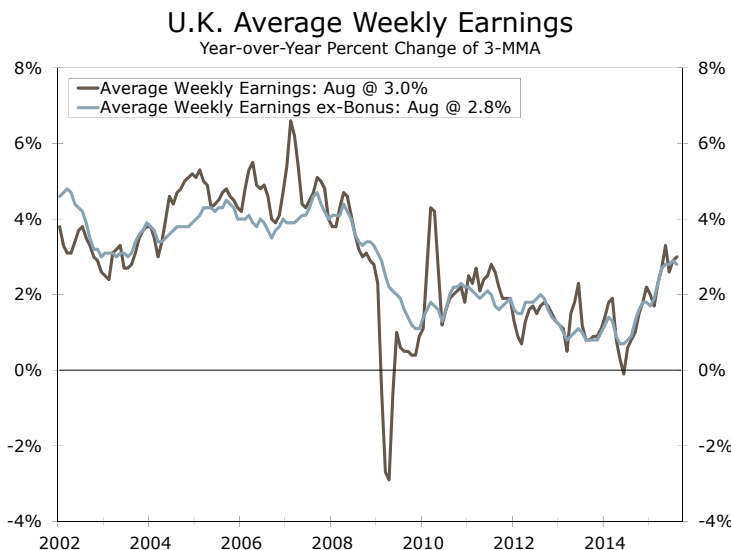
## China Industrial Production • Wednesday

Chinese industrial output growth has clearly slowed considerably over the past few years. Chinese industrial production grew just 5.7 percent from a year ago in September, roughly in line with the rates registered during the global recession in 2009. With the Caixin manufacturing PMI still in contraction territory, we expect industrial activity in China will continue to decelerate on trend.

Fortunately, retail sales have continued to accelerate throughout the year, with most analysts expecting sales growth to have picked up further in October. Diverging growth patterns in the services and industrial sectors in China is a theme we have stressed this year, and it aligns with Chinese authorities' attempts to rebalance away from investment-led growth and toward consumption. As such, we continue to expect the Chinese economy will experience a "soft landing" as they adjust to a new growth paradigm.

**Previous: 5.7%**

**Consensus: 5.8% (Year-over-Year)**



## Eurozone GDP • Friday

Real GDP in the Eurozone grew 0.4 percent in Q2, far from a blockbuster reading but enough to pull the year-ago growth rate up to 1.5 percent, the quickest pace since 2011. Growth was underpinned by consumer spending and net exports, while fixed investment contracted over the quarter. Next week's reading on Q3 GDP growth in the Eurozone will likely attract heightened investor attention, as it may play into expectations around the potential for the ECB to expand QE at its December meeting.

Despite a negative sequential growth print from retail sales this week, overall retail sales volumes in Q3 were up nearly 3 percent from the same quarter a year ago. All else equal, this suggests consumer spending growth likely remained solid over the quarter. Consensus expects the Eurozone economy grew 0.4 percent in the third quarter.

**Previous: 0.4%**

**Consensus: 0.3% (Quarter-over-Quarter)**



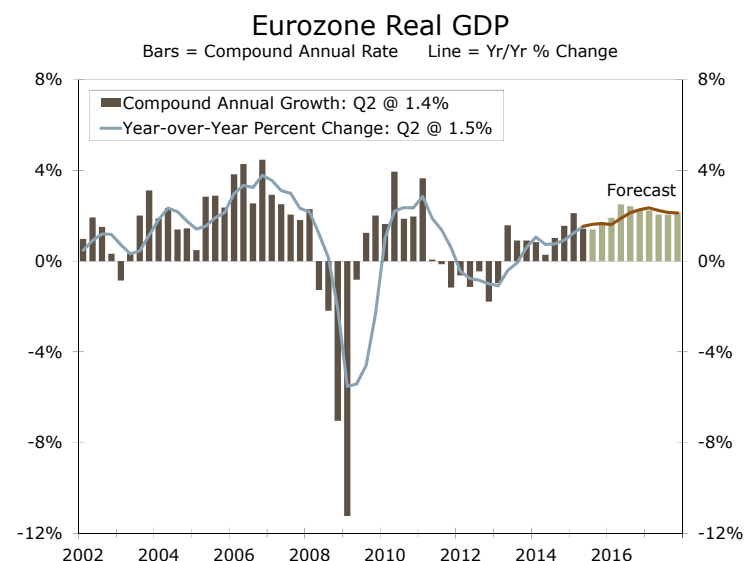
## U.K. Labor Market Report • Wednesday

The Bank of England's (BoE) Monetary Policy Committee (MPC) voted 8-1 to keep its policy rate unchanged this week, hardly a surprising development given overall CPI inflation in the United Kingdom is negative at present. In the minutes of its meeting, the MPC noted that it expected CPI inflation to remain below 1 percent until the second half of next year before returning to 2 percent in around two years.

Meanwhile, the U.K. labor market has continued to tighten throughout the year, albeit at a more gradual pace than prior years. Indeed, the unemployment rate has come down about 0.3 percentage points since the start of the year, and wage growth has steadily picked up since mid-2014. However, the nascent recovery in U.K. labor productivity, among other factors, has thus far attenuated the effects of higher wages on consumer price inflation.

**Previous (Unemployment Rate): 5.4%**

**Consensus: 5.3%**



Source: IHS Global Insight and Wells Fargo Securities, LLC



## Interest Rate Watch

### The Fed Gets the Green Light

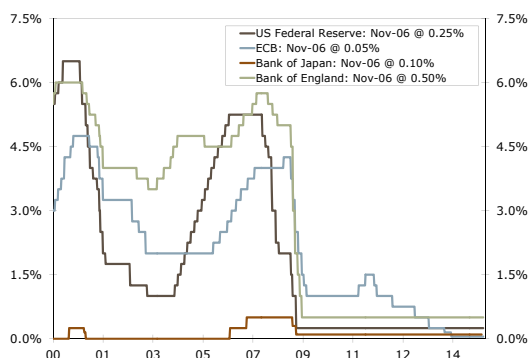
November's stronger than expected employment report is widely viewed as giving the Federal Reserve the green light to hike the federal funds rate at their December FOMC meeting. Not only did nonfarm payrolls rise much more than expected, but data for the prior two months were revised higher. Job gains were also extremely broad based and hours worked and average hourly earnings both posted strong gains.

One reason the financial markets place such importance on the monthly employment report is that it typically sets the tone for the rest of the month's economic data. The latest report suggests that incomes grew solidly in October and also point to a rebound in construction activity. The drag from the factory sector also appears to be lessening, with hours and the diffusion index both rising solidly.

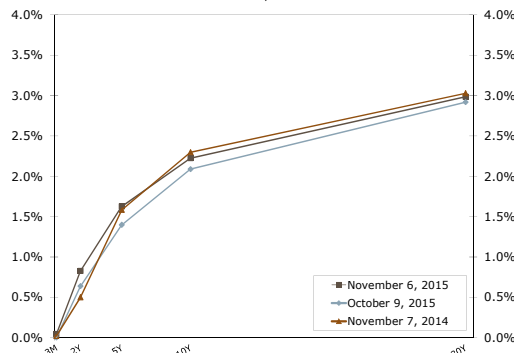
The sudden burst of job growth led to a sharp initial pullback in the financial markets. Although Chair Yellen has been particularly forthright about her intentions to begin raising interest rates before the end of this year, there has been a general wait-and-see attitude by investors that have been led down this road a few times in this cycle. The strength in the morning's report has caused investors to readjust their timetables. A December rate hike now looks likely. The federal funds rate futures for January are now essentially assigning a 70 percent probability that the Fed will raise the federal funds rate in December.

There is still a great deal of time between now and the December 16 FOMC meeting. There is plenty that can go wrong in the world and once again push the rate hike decision out a little further. That is not the basis for a forecast, however, and we expect the Fed to move in December. But market participants would be well served not to get too far ahead of the data. Even with October's strong gain, nonfarm employment growth averaged just 187,000 jobs per month and private sector payrolls growth has averaged 181,000 per month. That is close to the range the markets had been expecting and consistent with a slow but steady rise in the funds rate.

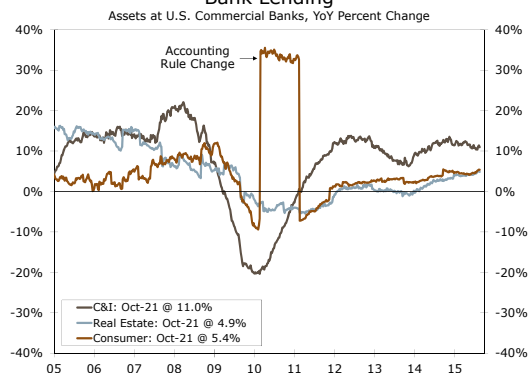
Central Bank Policy Rates



Yield Curve  
U.S. Treasuries, Active Issues



Bank Lending



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

## Credit Market Insights

### Demand Picks Up For CRE Lending

On Monday, the Federal Reserve Board released their Q3 Senior Loan Officer Opinion Survey on Bank Lending Practices. The survey reports quarterly changes in bank lending and loan demand to households and businesses.

Over the quarter, the most notable pickup in demand was seen in commercial real estate (CRE) loans. Banks reported stronger demand for CRE loans across the board, citing "moderately stronger" demand for multifamily residential properties (22.1 percent), construction & land development (30.9 percent), and nonfarm nonresidential properties (27.9 percent).

Since the start of the year, CRE lending has risen more than consumer or C&I lending, increasing 6.9 percent year to date. Commercial banks have added almost \$150 billion in CRE loans year over year, pushing its share of total loans & leases in bank credit to 20.6 percent. The largest CRE gains over the first nine months of the year have come from nonfarm nonresidential property loans, which include loans secured by retail stores and office buildings.

The Fed's survey reinforces the improvement in CRE market fundamentals we have seen this year. We expect CRE loan demand to continue to rise, with the strengthening of the labor market and expectations of economic activity picking up further in the final quarter of this year.

### Credit Market Data

#### Mortgage Rates

	Current	Week Ago	4 Weeks Ago	Year Ago
30-Yr Fixed	3.87%	3.76%	3.82%	4.02%
15-Yr Fixed	3.09%	2.98%	3.03%	3.21%
5/1 ARM	2.96%	2.89%	2.88%	2.97%
1-Yr ARM	2.62%	2.54%	2.54%	2.45%

#### Bank Lending

	Current Assets (Billions)	1-Week Change (SAAR)	4-Week Change (SAAR)	Year-Ago Change
Commercial & Industrial	\$1,928.2	-10.03%	11.52%	10.96%
Revolving Home Equity	\$440.2	-1.65%	-4.79%	-4.37%
Residential Mortgages	\$1,624.2	21.40%	1.63%	2.48%
Commercial Real Estate	\$1,746.1	15.87%	12.12%	9.94%
Consumer	\$1,256.6	6.01%	12.19%	5.37%

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

## Topic of the Week

### Inflation Expectations Ease Further

Longer-term inflation expectations have slid over recent months. The measure from the University of Michigan's Survey of Consumer Sentiment declined to their post-recession low in October and breakeven rates of inflation implied by Treasury Inflation Protected Securities have also declined markedly over the past several months.

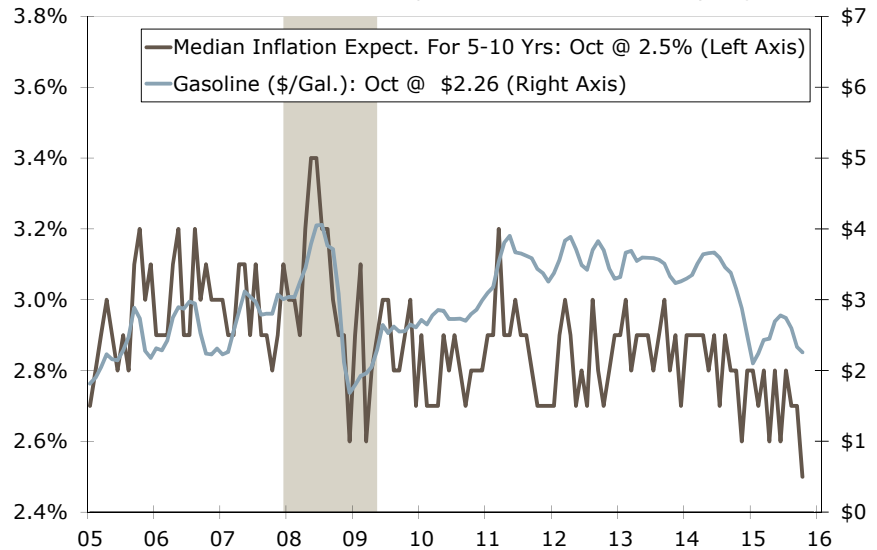
Declining inflation expectations has been accompanied by several lower-than-expected inflation reports. Constant lower-than-expected inflation, gradually increasing wage pressures and low commodity prices have tended to stoke deflation fears, which the Fed has largely looked past. The persistence of core inflation below two percent, however, may prove problematic as businesses continue to report sluggish sales and revenue growth at a time when healthcare and regulatory costs have risen. The resulting profits squeeze has fueled cost cutting and increased merger and acquisition activity aimed at cutting costs.

Up until the recently released nonfarm payrolls report, the lack of any meaningful pickup in wage growth, even as the national unemployment rate reaches 5 percent, has led many Fed governors to question whether the Phillips Curve has broken down. We suspect the recent breakdown is due to the still high proportion of involuntary part-time workers and unusually low levels of labor force participation in general. The U-6 measure, which captures these factors, has been falling and is nearing levels that are historically consistent with stronger wage gains.

Recent comments by the Fed Chair appear to corroborate this view. Chair Yellen said in a testimony to Congress earlier this week that a potential December rate hike "would be based on an expectation—which I believe is justified—that with an improving labor market and transitory factors fading, that inflation will move up to 2 percent." This comment was widely interpreted as putting a December rate hike back on the table, a view we also share.

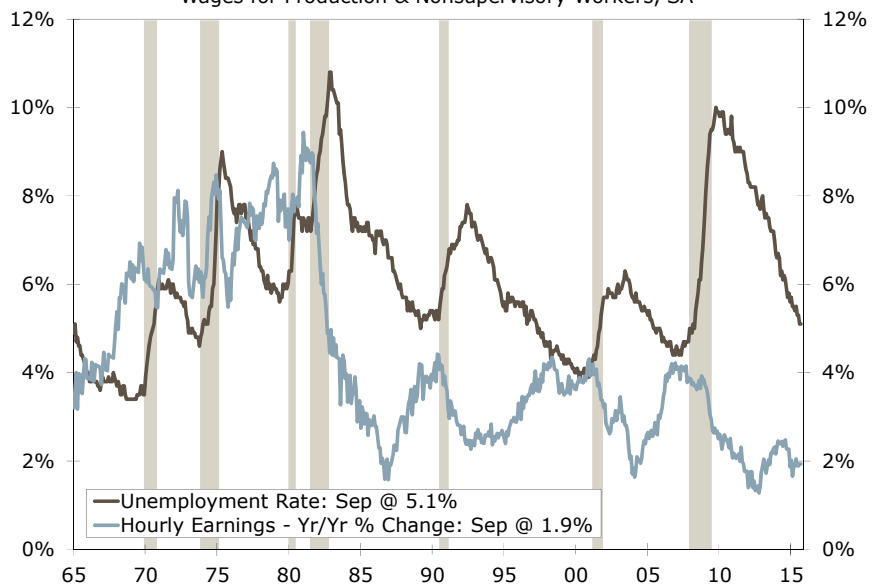
### Inflation Expectations and Gasoline Prices

Median 5-10 Year Inflation Expectations, Gasoline Monthly Avg.



### Unemployment and Wage Rates

Wages for Production & Nonsupervisory Workers, SA



Source: Bloomberg, LP, U.S. Dept. of Commerce, U.S. Dept. of Labor 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](http://www.wellsfargo.com/economicsemail)

The *Weekly Economic & Financial Commentary* is available via the Internet at [www.wellsfargo.com/economics](http://www.wellsfargo.com/economics)

Via The Bloomberg Professional Service at WFRE.

And for those with permission at [www.wellsfargoresearch.com](http://www.wellsfargoresearch.com)

## Market Data ♦ Mid-Day Friday

## U.S. Interest Rates

	Friday 11/6/2015	1 Week Ago	1 Year Ago
3-Month T-Bill	0.07	0.07	0.02
3-Month LIBOR	0.34	0.32	0.23
1-Year Treasury	0.57	0.49	0.17
2-Year Treasury	0.90	0.72	0.55
5-Year Treasury	1.75	1.52	1.67
10-Year Treasury	2.34	2.14	2.39
30-Year Treasury	3.09	2.92	3.10
Bond Buyer Index	3.66	3.67	3.90

## Foreign Exchange Rates

	Friday 11/6/2015	1 Week Ago	1 Year Ago
Euro (\$/€)	1.073	1.101	1.238
British Pound (\$/£)	1.507	1.543	1.583
British Pound (£/€)	0.712	0.713	0.782
Japanese Yen (¥/\$)	123.000	120.620	115.210
Canadian Dollar (C\$/ \$)	1.330	1.308	1.142
Swiss Franc (CHF/\$)	1.005	0.988	0.973
Australian Dollar (US\$/A\$)	0.705	0.714	0.856
Mexican Peso (MXN/\$)	16.849	16.502	13.637
Chinese Yuan (CNY/\$)	6.354	6.317	6.113
Indian Rupee (INR/\$)	65.763	65.265	61.415
Brazilian Real (BRL/\$)	3.838	3.856	2.570
U.S. Dollar Index	99.139	96.946	88.012

Source: Bloomberg LP and Wells Fargo Securities, LLC

## Foreign Interest Rates

	Friday 11/6/2015	1 Week Ago	1 Year Ago
3-Month Euro LIBOR	-0.08	-0.07	0.06
3-Month Sterling LIBOR	0.58	0.58	0.56
3-Month Canada Banker's Acceptance	0.82	0.84	1.28
3-Month Yen LIBOR	0.08	0.08	0.11
2-Year German	-0.29	-0.32	-0.06
2-Year U.K.	0.75	0.63	0.67
2-Year Canadian	0.68	0.58	1.03
2-Year Japanese	0.00	0.01	0.04
10-Year German	0.70	0.52	0.83
10-Year U.K.	2.05	1.92	2.25
10-Year Canadian	1.73	1.54	2.09
10-Year Japanese	0.32	0.31	0.47

## Commodity Prices

	Friday 11/6/2015	1 Week Ago	1 Year Ago
WTI Crude (\$/Barrel)	44.35	46.59	77.91
Gold (\$/Ounce)	1087.73	1142.16	1141.85
Hot-Rolled Steel (\$/S.Ton)	393.00	397.00	632.00
Copper (¢/Pound)	224.35	231.75	301.75
Soybeans (\$/Bushel)	8.67	8.81	10.11
Natural Gas (\$/MMBTU)	2.33	2.32	4.40
Nickel (\$/Metric Ton)	9,771	10,364	15,262
CRB Spot Inds.	411.52	413.74	504.83

## Next Week's Economic Calendar

	Monday 9	Tuesday 10	Wednesday 11	Thursday 12	Friday 13
U.S. Data		<b>NFIB Small Business Optimism</b> September 96.1 October 96.4 (C)		<b>JOLTS</b> August 5370 September 5370 (C)	<b>Retail Sales (MoM)</b> September 0.1% October 0.2% (W)
		<b>Import Price (MoM)</b> September -0.1% October -0.2% (W)			<b>PPI Final Demand (MoM)</b> September -0.5% October 0.3% (W)
Global Data			<b>United Kingdom</b> <b>ILO Unemployment Rate</b> Previous (August) 5.4%		<b>Eurozone</b> <b>GDP (YoY)</b> Previous (Q2) 0.4%
			<b>China</b> <b>Industrial Production (YoY)</b> Previous (September) 5.7%		

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 Viloría, CFA	Currency Strategist	(212) 214-5637	eric.viloría@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 Economics Group publications are produced by Wells Fargo Securities, LLC, a U.S. broker-dealer registered with the U.S. Securities and Exchange Commission, the Financial Industry Regulatory Authority, and the Securities Investor Protection Corp. Wells Fargo Securities, LLC, distributes these publications directly and through subsidiaries including, but not limited to, Wells Fargo & Company, Wells Fargo Bank N.A., Wells Fargo Advisors, LLC, Wells Fargo Securities International Limited, Wells Fargo Securities Asia Limited and Wells Fargo Securities (Japan) Co. Limited. Wells Fargo Securities, LLC ("WFS") is registered with the Commodities Futures Trading Commission as a futures commission merchant and is a member in good standing of the National Futures Association. Wells Fargo Bank, N.A. ("WFBNA") is registered with the Commodities Futures Trading Commission as a swap dealer and is a member in good standing of the National Futures Association. WFS and WFBNA are generally engaged in the trading of futures and derivative products, any of which may be discussed within this publication. Wells Fargo Securities, LLC does not compensate its research analysts based on specific investment banking transactions. Wells Fargo Securities, LLC's research analysts receive compensation that is based upon and impacted by the overall profitability and revenue of the firm which includes, but is not limited to investment banking revenue. The information and opinions herein are for general information use only. Wells Fargo Securities, LLC does not guarantee their accuracy or completeness, nor does Wells Fargo Securities, LLC assume any liability for any loss that may result from the reliance by any person upon any such information or opinions. Such information and opinions are subject to change without notice, are for general information only and are not intended as an offer or solicitation with respect to the purchase or sales of any security or as personalized investment advice. Wells Fargo Securities, LLC is a separate legal entity and distinct from affiliated banks and is a wholly owned subsidiary of Wells Fargo & Company © 2015 Wells Fargo Securities, LLC.

### Important Information for Non-U.S. Recipients

For recipients in the EEA, this report is distributed by Wells Fargo Securities International Limited ("WFSIL"). WFSIL is a U.K. incorporated investment firm authorized and regulated by the Financial Conduct Authority. The content of this report has been approved by WFSIL a regulated person under the Act. For purposes of the U.K. Financial Conduct Authority's rules, this report constitutes impartial investment research. WFSIL does not deal with retail clients as defined in the Markets in Financial Instruments Directive 2007. The FCA rules made under the Financial Services and Markets Act 2000 for the protection of retail clients will therefore not apply, nor will the Financial Services Compensation Scheme be available. This report is not intended for, and should not be relied upon by, retail clients. This document and any other materials accompanying this document (collectively, the "Materials") are provided for general informational purposes only.

SECURITIES: NOT FDIC-INSURED/NOT BANK-GUARANTEED/MAY LOSE VALUE