March 27, 2015

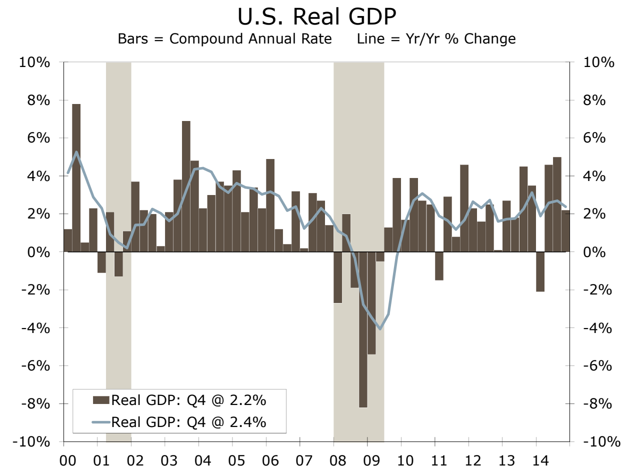
Economics Group

Weekly Economic & Financial Commentary

U.S. Review

It's Shaping Up to Be a Soft Quarter

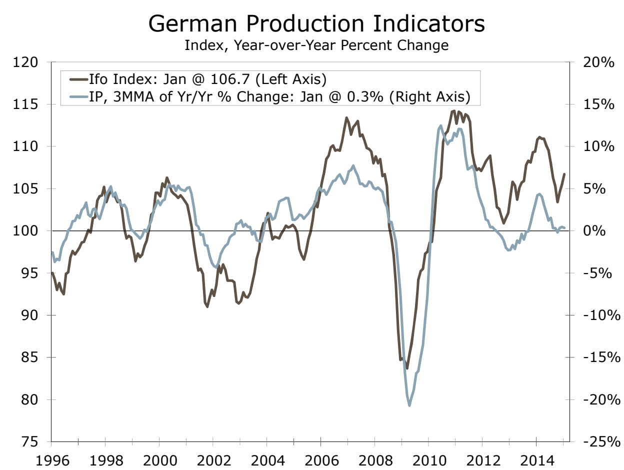
- Housing market data looked better this week with both existing and new home sales rising in February.
- Consumer prices rose 0.2 percent in February as oil prices edged higher for the month.
- Durable goods orders pulled back sharply in February, but even more concerning was the decline in core capital goods orders and shipments, which suggests less business investment in the first quarter.
- The third look at fourth-quarter GDP showed the economy expanded at a 2.2 percent pace identical to the second estimate.



Global Review

The Eurozone on One Engine; Brazil Stagnant

- For now, the Eurozone's economy is improving as the German economy strengthens. The ZEW and the IFO indices are both showing improvement. However, we should start to see other economies of the Eurozone region follow the lead of Germany.
- The Brazilian economy was able to avoid a recession in 2014 as it barely grew by a 0.1 percent rate. And this year does not look much better for the Brazilian economy as we are expecting a drop of 0.2 percent. That is, we suspect stagnant growth will continue for several years.



Wells Fargo U.S. Economic Forecast

	Actual 2014 1Q	Actual 2014 2Q	Actual 2014 3Q	Actual 2014 4Q	Forecast 2015 1Q	Forecast 2015 2Q	Forecast 2015 3Q	Forecast 2015 4Q	Actual 2012	Actual 2013	Forecast 2014	Forecast 2015	Forecast 2016
Real Gross Domestic Product [1]	-2.1	4.6	5.0	2.2	0.9	3.4	2.9	3.0	2.3	2.2	2.4	2.7	3.0
Personal Consumption	1.2	2.5	3.2	4.4	2.8	3.3	2.8	2.8	1.8	2.4	2.5	3.2	2.8
Inflation Indicators [2]													
PCE Deflator	1.1	1.6	1.5	1.1	0.2	0.1	0.3	0.9	1.8	1.2	1.3	0.4	2.0
Consumer Price Index	1.4	2.1	1.8	1.2	-0.1	-0.2	0.1	0.9	2.1	1.5	1.6	0.2	2.3
Industrial Production [1]	3.9	5.7	4.1	4.4	0.4	4.5	3.5	3.1	3.8	2.9	4.2	3.2	3.5
Corporate Profits Before Taxes [2]	-4.8	0.1	1.4	-0.2	4.2	4.2	4.7	3.7	11.4	4.2	-0.8	4.2	3.4
Trade Weighted Dollar Index [3]	76.9	75.9	81.3	85.1	91.3	92.5	93.8	95.0	73.5	75.9	78.5	93.1	97.5
Unemployment Rate	6.6	6.2	6.1	5.7	5.5	5.4	5.3	5.2	8.1	7.4	6.2	5.4	5.0
Housing Starts [4]	0.93	0.99	1.03	1.06	1.02	1.13	1.21	1.24	0.78	0.92	1.00	1.13	1.31
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	1.56
Conventional Mortgage Rate	4.34	4.16	4.16	3.86	3.88	3.95	4.16	4.22	3.66	3.98	4.17	4.05	4.49
10 Year Note	2.73	2.53	2.52	2.17	2.00	2.20	2.36	2.40	1.80	2.35	2.54	2.24	2.65

Forecast as of: March 27, 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

It's Shaping Up to Be a Soft Quarter

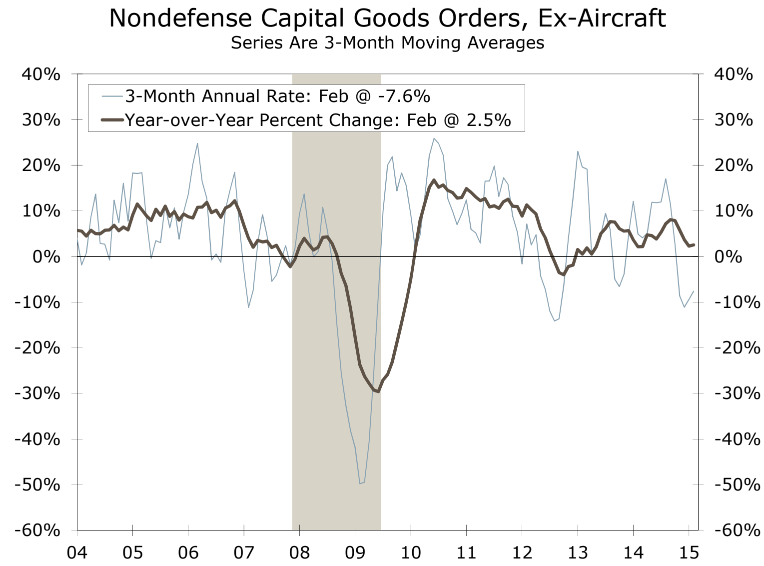
Economic data so far in the first quarter have pointed to a downshift in the pace of growth. There are a number of factors likely weighing on U.S. growth this quarter, including unusually cold winter weather, sluggish global growth and the much stronger U.S. dollar. Data this week on durable goods orders continued to point toward a weak quarter for the manufacturing sector. Consumer prices, while still at a low level, rose slightly in February as oil prices edged slightly higher. Housing market data on sales activity showed a significant improvement, which was welcomed news after last week's disappointing housing starts numbers. The third look at fourth-quarter real GDP growth was unrevised at 2.2 percent as less inventory building was offset by stronger consumer spending. The downward revision to inventories implies that there may be less of a drag in the first quarter from inventories, given the pace of building in Q4.

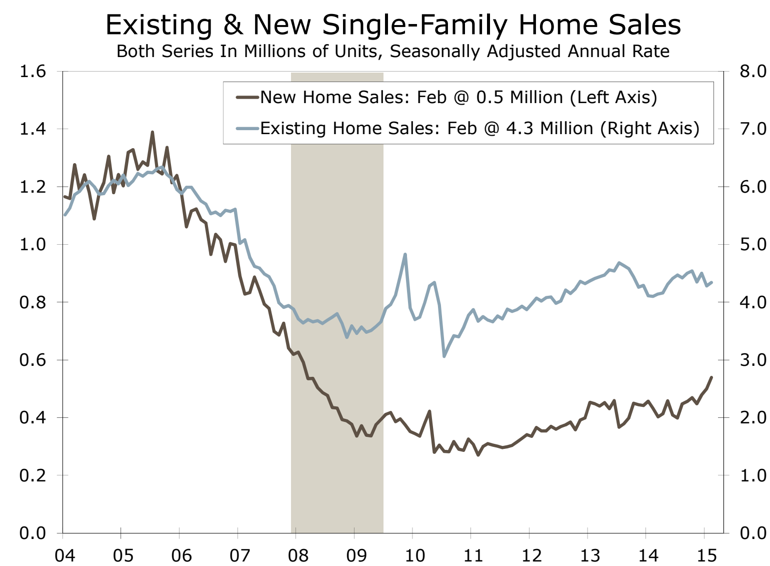
Durable goods orders declined 1.4 percent in February, while new orders for January were revised downward to 2.0 percent. Some of the weakness in the headline reading was due to a 3.5 percent drop in the volatile transportation component. More concerning was the slide in core capital goods orders, which posted a 1.4 percent decline for the month. In addition, core capital goods shipments rose just 0.2 percent. The soft durables report suggests manufacturing activity and business investment will be soft in the first quarter.

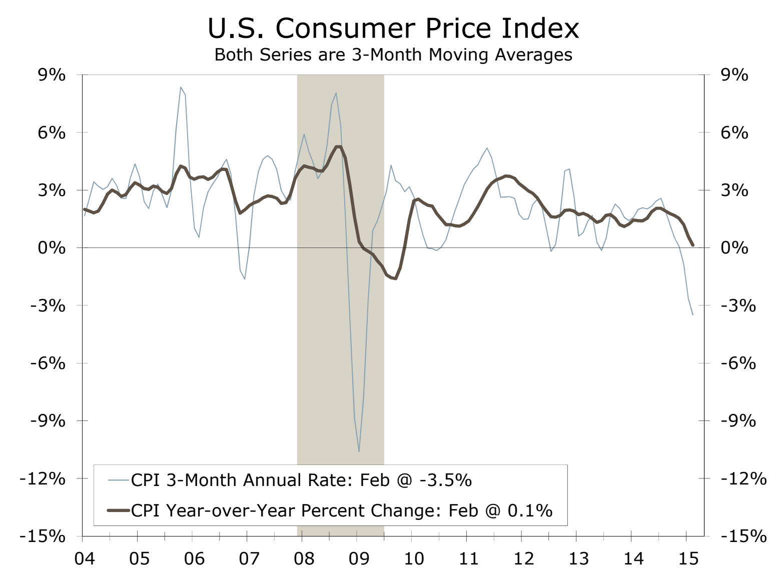
Home sales data for February looked much better than last week's housing starts. New home sales jumped 7.8 percent for the month even with the harsh winter weather. One possibility for decoupling of new home sales and housing starts is that the rise in the number of homes sold may be that many were not started or still under construction. Existing home sales also climbed higher in February, rising 1.2 percent to a 4.88 million unit pace. While it is too early to tell for sure, the stronger sales activity last month looks promising for the spring home buying season.

Consumer prices rose 0.2 percent last month as oil prices rose slightly for the month. Core inflation remained firm, also rising 0.2 percent mostly on stronger services inflation. Looking ahead, we expect core inflation to remain firm and, in turn, support the case for a hike in the fed funds rate later this year.

After updating the base for our forecast, revised fourth-quarter GDP growth and accounting for the economic data this week, we have downwardly revised our view of Q1 GDP growth to 0.9 percent. We continue to expect softness in both residential and nonresidential investment, government, trade and inventory investment in the Q1. We have downwardly revised our estimate for equipment spending and consumer spending as the effects of severe winter weather appear to have adversely affected growth more than we initially thought. That said, given the effects of weather on Q1 growth, we expect some of the economic activity to be made up in Q2, thus we have revised our Q2 GDP number higher. We do expect growth to remain robust throughout the rest of this year as some headwinds subside and global growth strengthens.







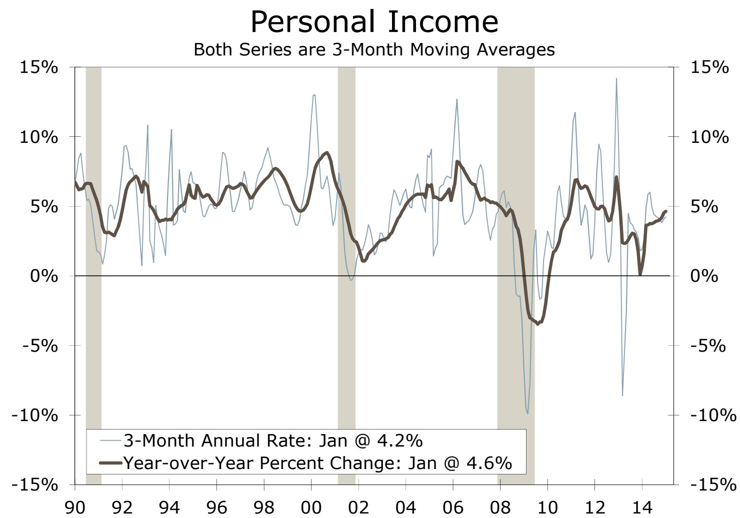
Source: U.S. Dept. of Commerce, U.S. Dept. of Labor, NAR and Wells Fargo Securities, LLC

Personal Income • Monday

The labor market in the United States has strengthened in recent months, leading to solid income gains. Personal income grew 0.3 percent in January, thanks to a sizable gain in wages and salaries. This trend seems to have continued into February when the economy added 295,000 jobs to its payrolls. Such strong employment growth should help boost personal income 0.4 percent in the month. At the same time, spending declined as the price of goods fell. Consumer expenditures likely perked up some in February, though we expect the gain to be just 0.1 percent. With the sizable boost to income and low inflation, consumers have been putting more money away, lifting the savings rate to 5.5 percent in January. Consumer prices look to be bottoming out after a 0.5 percent drop in January. The headline PCE deflator should have gained 0.2 percent in February, while core PCE ticked up 0.1 percent over the month and 1.4 percent year over year.

Previous: 0.3% **Wells Fargo: 0.4%**

Consensus: 0.3%

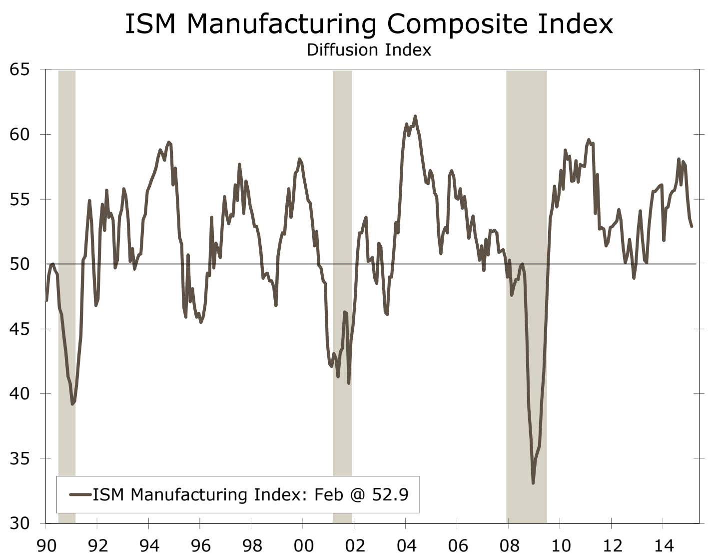


ISM Manufacturing • Wednesday

Manufacturers have managed to remain in expansion territory despite facing two formidable headwinds. The ISM manufacturing Index reached a recent high of 58.1 back in August before sliding down to 52.9 in February. Much of downward trend can be blamed on a stronger dollar and weaker oil prices. The former has had broad implications for the factory sector that is finding it more difficult to compete on the international stage. In addition, export orders have been in negative territory so far this year. The oil price declines have caused domestic oil producers to dramatically cut capital spending, causing weakness for manufacturers that supply equipment to those producers. So far in March, the regional PMIs have been mixed, with New York and Philadelphia staying positive, while Kansas City and Richmond slipped into negative territory. We expect the ISM manufacturing Index ticked up slightly to 53.0 in March, only slightly above the 52.9 reading seen the prior month.

Previous: 52.9 **Wells Fargo: 53.0**

Consensus: 52.5

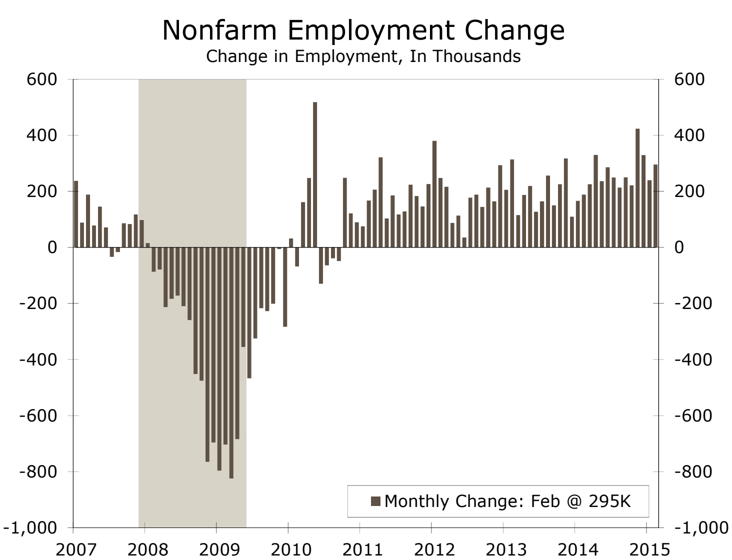


Nonfarm Payrolls • Friday

The labor market has made great strides lately. In February, the U.S. economy added 295,000 jobs, while the unemployment rate dropped two-tenths of a percentage point to just 5.5 percent. The strong showing in the month comes after a noticeable acceleration at the end of 2014. The largest gains were seen in service-providing industries, specifically professional & business services and leisure & hospitality. Average hourly earnings grew a lackluster 0.1 percent in February, though this came after a solid 0.5 percent gain in the prior month. The absence of stronger wage growth has been a key concern for the Fed. Jobless claims continue to fall lower and point to further employment gains; however, the exceptionally strong pace we have seen most recently is unlikely to be sustainable. We expect that the pace of hiring moderated to a still-strong 240,000 net gain in March. Despite the strong gains, the unemployment rate should hold at 5.5 percent in the month.

Previous: 295,000 **Wells Fargo: 240,000**

Consensus: 250,000



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

Global Review

The Eurozone Is Starting to Run on One Engine

For several months, we have been pointing to small but positive growth coming from the Eurozone, and those positive data points seem to have broadened a bit more in the past several weeks. However, this broadening improvement does not mean that the Eurozone as a whole is strengthening; it just means that the German economy's prospects are brightening.

March started with the release of a better-than-expected February PMI manufacturing index for Germany, followed by a strong posting by retail sales, both on a year-over-year basis and on a month-over-month basis. Although factory orders tanked in January, they did so after a strong posting in the previous month. Furthermore, December's growth in factory orders was stronger than the drop in January. Meanwhile, industrial production for January was also strong, up 0.6 percent after an upwardly revised December number, at 1.0 percent.

By mid-March, we got the release of the ZEW current situation index showing a very strong improvement, at 55.1 in March, from February reading of 45.5. The ZEW expectations number was also higher in March than in February even though consensus expected an even higher reading.

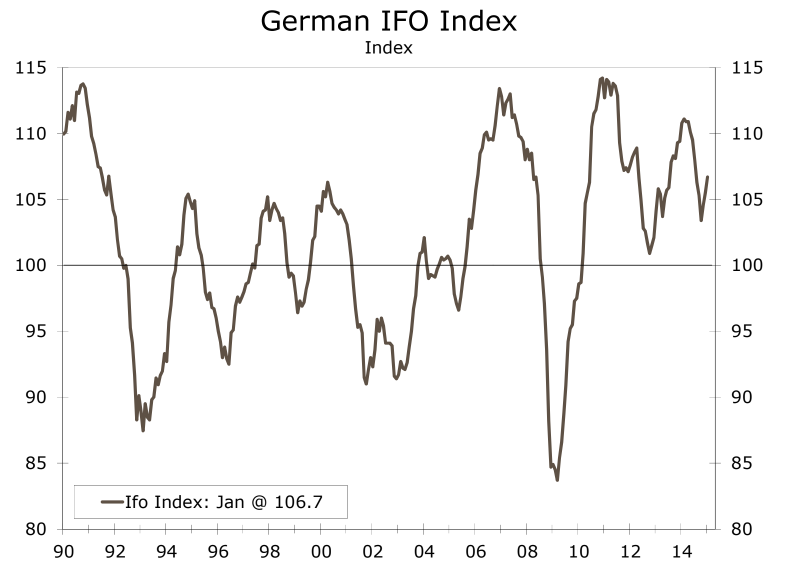
But the good news did not end there, as the preliminary March PMI reported early this week improved further, from 51.1 to 52.4, while the IFO business climate also ticked up a bit, from 106.8 in February to 107.9 in March. On March 26, the Gfk consumer confidence index hit its highest reading, at 10, since 2001 in a clear indication that German consumers are feeling fairly confident on the future of the German economy. Although there is a risk that this index could be temporarily affected by the recent events with the Germanwings airplane accident, the probability is that this deterioration is going to be temporary.

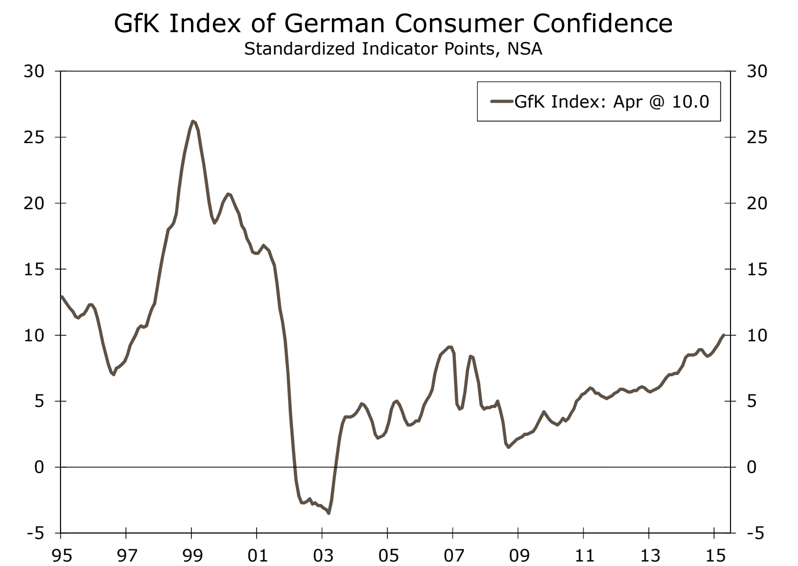
Thus, for now the Eurozone's economy is improving as the German economy improves. However, we should start to see other economies of the Eurozone region follow the lead of Germany.

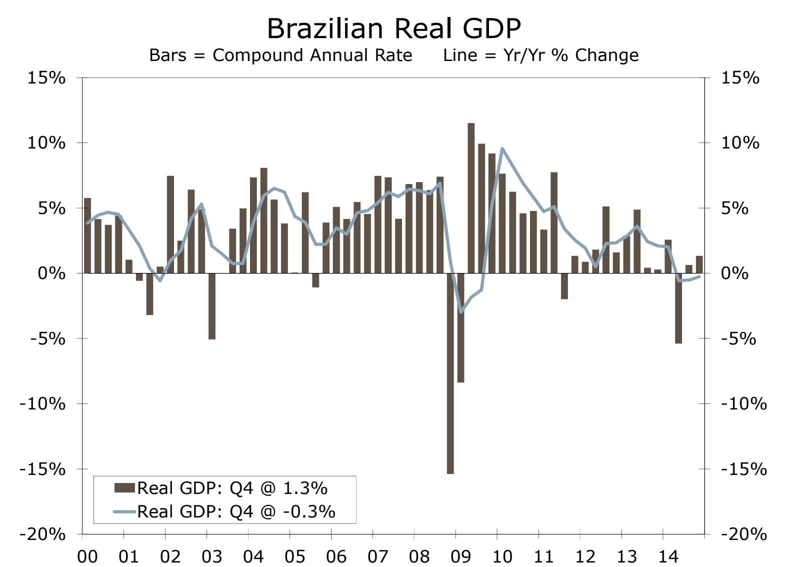
Brazilian Economy Continued to Struggle in 2014

The Brazilian economy was able to avoid a recession in 2014 as it barely grew by a 0.1 percent rate. However, the IBGE, the country's statistical institute, also revised growth for both 2012 and 2013 upward. Growth for 2012 was originally reported at 1.0 percent and was revised to 1.8 percent. Meanwhile, growth in 2013 was originally reported at 2.5 percent and was revised up to 2.7 percent.

On a seasonally-adjusted basis, the Brazilian economy grew a better-than-expected 0.3 percent in the last quarter of 2014 after growing 0.2 percent in the third quarter. The biggest contributor to growth in the last quarter was personal consumption expenditures, growing 1.1 percent, while exports of goods and services collapsed 12.3 percent during the quarter. This year does not look much better for the Brazilian economy as we are expecting a decline in real GDP of 0.2 percent.







Source: IHS Global Insight and Wells Fargo Securities, LLC

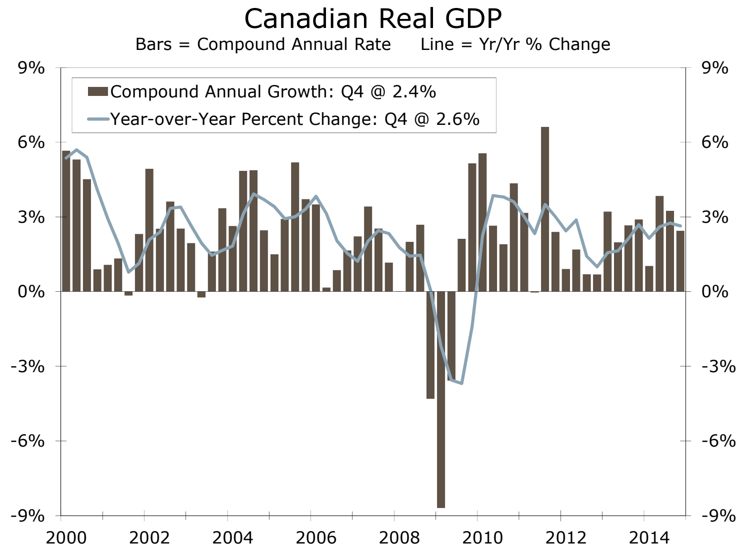
Canadian GDP Growth • Tuesday

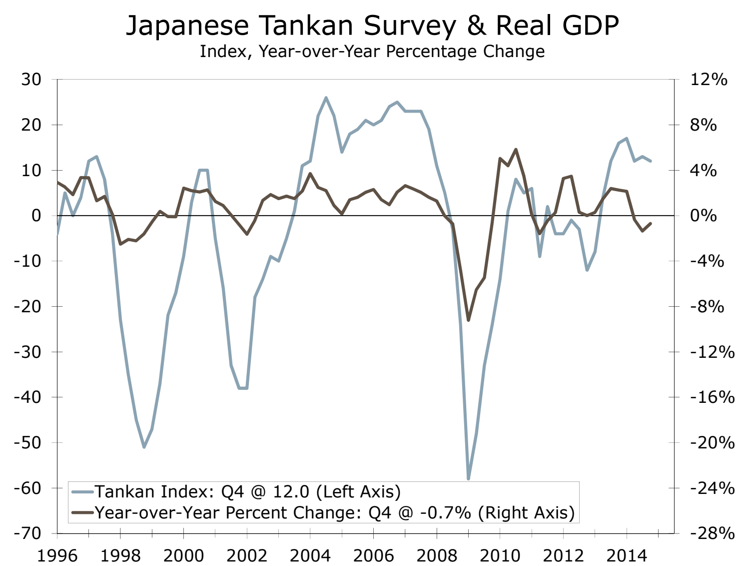
Real GDP in Canada rose at a solid annualized rate of 2.4 percent in Q4 2014. Moreover, the quarter ended on a strong note as real GDP rose 0.3 percent (not annualized) in December relative to the previous month. (Canada is one of the only countries in the world to release GDP data on a monthly basis.) If the January outturn, which is scheduled to print on Tuesday, is solid, then it would indicate that the Canadian economic has started off 2015 with a bit of momentum.

Canada releases its trade data for January on Thursday. The country has incurred modest trade deficits for four consecutive months due, at least in part, to the rout in oil prices that has occurred since last summer. If, as seems likely, oil prices remain depressed for the foreseeable future, then Canada likely will continue to incur modest trade deficits for some time.

Previous: 0.3% (Month-on-Month)

Consensus: -0.2%





Japanese Tankan Survey • Wednesday

The Tankan survey of Japanese business sentiment is widely followed by analysts and market participants because it has a fair degree of correlation with the year-over-year rate of Japanese real GDP growth. The "headline" number, which measures sentiment among large manufacturers, has been above the demarcation line separating expansion from contraction for seven consecutive quarters. If, as the consensus forecast anticipates, the headline number rises again, it would suggest that Japanese real GDP growth has strengthened in the first quarter.

There also are some "hard" data on the docket next week, including February data on housing starts and industrial production (IP). Japanese IP shot up 3.7 percent in January following its 0.8 percent increase during the previous month. In other words, it appears that IP has risen at a robust pace in Q1, which confirms the message the Tankan survey is sending.

Previous: 12

Consensus: 14

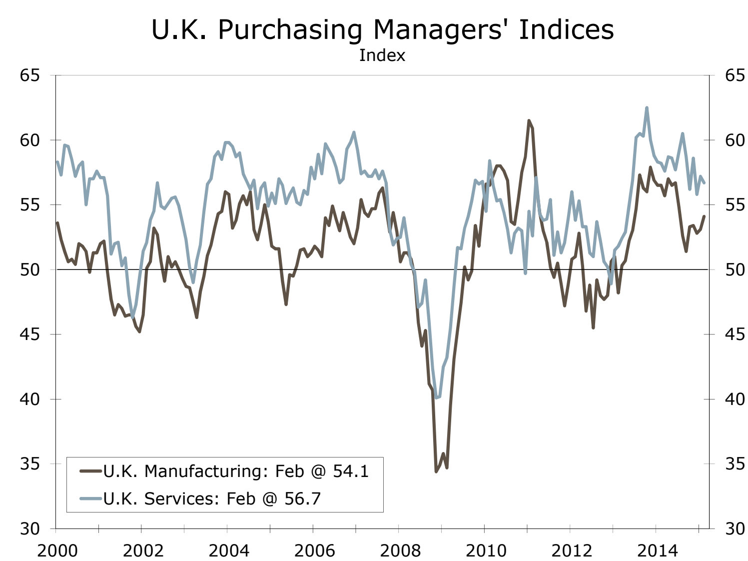
U.K. Manufacturing PMI • Wednesday

The U.K. manufacturing PMI in February stood well above the demarcation line separating expansion from contraction. Moreover, the index has risen for two consecutive months, suggesting that manufacturing production may be accelerating. The construction PMI, which currently stands at a very high reading of 60.1, is slated for release on Thursday.

The third estimate of Q4 GDP growth is on the docket on Tuesday. The latest estimate showed that real GDP rose 0.5 percent (2.2 percent at an annualized rate) on a sequential basis in Q4, and any revisions to this estimate likely will be minor. In addition, a widely followed index of consumer confidence, which currently stands at a 10-year high, will be released on Monday. If, as is expected, the index remains at an elevated level, it would be consistent with continued strong growth in consumer spending.

Previous: 54.1

Consensus: 54.4



Source: IHS Global Insight and Wells Fargo Securities, LLC

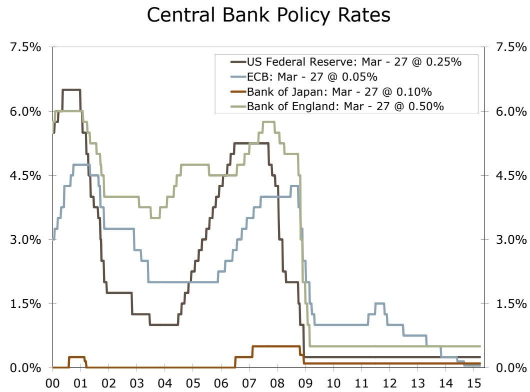
Interest Rate Watch

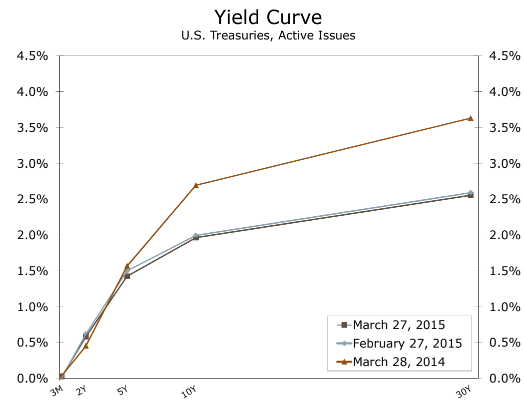
Fed Speak: Widespread Support for 2015 Rate Rise

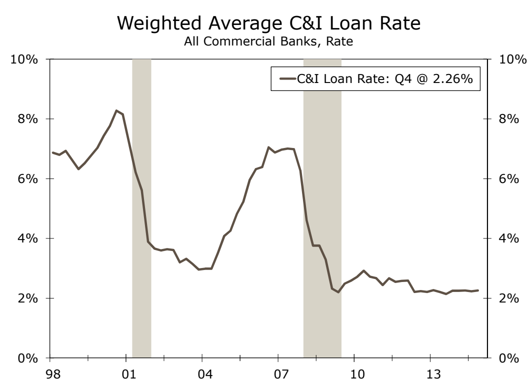
Interest rates fell in the wake of the Fed's meeting last week, with the yield on the 10-year Treasury note falling nearly 20 bps through Wednesday. The move came in part as the committee expected the fed funds target range to end the year lower than previously indicated, intimating a later date of liftoff. Data out of the industrial sector this week only added to the slate of weaker-than-expected economic reports of late. The sharp strengthening in dollar in recent months appears to be taking its toll on the manufacturing industry, with durable goods orders posting the third decline in four months.

Yet, many FOMC members have viewed the recent spate of weakness as temporary and expect activity to perk up in the coming quarters, a view we share. While the path of the interest rates projected by FOMC members last week in the "dot plot" implies a later date of liftoff, the bulk of the committee still sees an increase at some point this year.

Importantly, more moderate members are publicly discussing the need to raise rates in 2015. In a speech this week, Board of Governors Vice Chairman Stanley Fischer noted the cumulative progress in the economy and that "an increase in the target federal funds range will likely be warranted before the end of the year." Atlanta Fed President Dennis Lockhart, who has never dissented, stated there was a "high likelihood" of raising rates in June, July or September of this year. Similarly, San Francisco Fed President John Williams reiterated comments that mid-year "will be the time to have a discussion about starting to raise rates." Taking a more hawkish view is St. Louis Fed President James Bullard, who stated this week that "zero is no longer the appropriate rate for the U.S. economy." Therefore despite recent weakness in some of the economic data, policymakers remain on track to begin tightening later this year. Markets appear to be taking heed, with rates ticking up again over the past couple of days.







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

Credit Market Insights

Cheap Credit: Where's the Capex?

The cost of credit has been hovering around all-time lows for several years now, with the weighted-average commercial and industrial loan rate at 2.26 percent as of Q4 2014 (bottom chart). These low rates spurred strong consumer demand for durable goods in the earlier years of the recovery. Recently, however, new orders for durable goods have been weak, declining in three of the past four months. Business fixed investment (BFI) posted an anemic 1.9 percent annualized growth rate in Q4, led by an outright decline in equipment spending. Why has cheaper credit not spurred more capital investment?

As we have mentioned in prior commentary, oil price declines have played a key role. Cuts in mining and oil machinery investment shaved a full percentage point off equipment investment growth in Q4, and the knock-on effects in other sectors likely added further downward pressure. Oil prices have also contributed to disinflation, which depresses the nominally-reported orders figures. Finally, the stronger U.S. dollar makes our exports more expensive to foreign buyers, which has likely made corporations with international exposure cautious about their capex outlook.

Amid the broad-based weakness, we expect weak outturns for BFI in Q1 and Q2 of this year, but for activity to ramp up again in H2 as oil prices rebound and inflation picks up.

Credit Market Data

Mortgage Rates	Current	Week Ago	4 Weeks Ago	Year Ago
30-Yr Fixed	3.69%	3.78%	3.75%	4.40%
15-Yr Fixed	2.97%	3.06%	3.03%	3.42%
5/1 ARM	2.92%	2.97%	2.96%	3.10%
1-Yr ARM	2.46%	2.46%	2.44%	2.44%

Bank Lending	Current Assets (Billions)	1-Week Change (SAAR)	4-Week Change (SAAR)	Year-Ago Change
Commercial & Industrial	$1,843.9	9.63%	26.13%	12.38%
Revolving Home Equity	$455.1	-3.32%	0.03%	-3.01%
Residential Mortgages	$1,589.3	22.22%	11.76%	1.69%
Commerical Real Estate	$1,643.1	20.76%	25.99%	8.08%
Consumer	$1,199.2	3.46%	-1.57%	4.47%

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

Topic of the Week

What's Driving Consumer Spending?

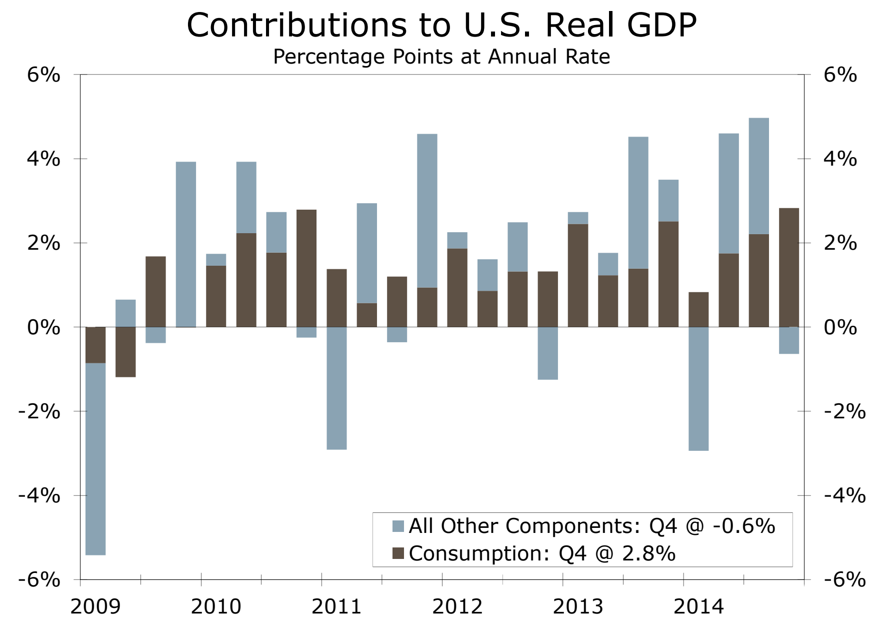
Amid all the noisy domestic economic data we have seen in recent years, one of the most steadfast indicators of activity has been real consumer spending. Given that consumption accounts for about 70 percent of U.S. GDP, real spending has been a key driver of GDP growth over the past few years (top chart). To get a better sense of what is driving consumption, we employed econometric analysis to determine what other economic variables drive growth in real spending.

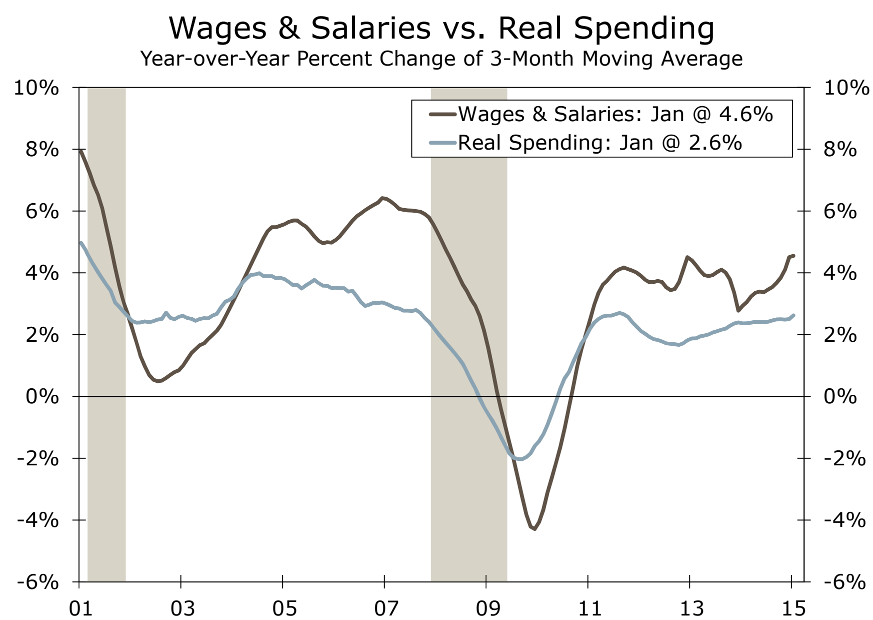
In part one of our series on the drivers of consumer spending, we look at a number of measures of consumers' income and determine empirically which are best at gauging real spending activity. We employed cross-correlation analysis on each of these income measures against real consumer spending, which allows us to also determine if there is a leading, lagging or coincident relationship.

Of all the income measures we analyzed, the three best gauges of real spending activity were wages and salaries, real disposable income and real disposable income per capita. All of these measures are two-month lagging indicators of real spending activity, so they unfortunately do not offer much leading indication of future real consumption. Wages and salaries explain roughly 75 percent of the variation in real spending, the highest value of any variable in our sample (bottom chart).

Interestingly, there was one measure we looked at, income expectations, which offered a leading signal for future spending. Expectations of increased income six-months ahead tend to lead increases in real spending by about one month, and this variable explains roughly one-third of the variation in real spending.

For further reading, see our special report, *"Drivers of Consumer Spending Part I: Which Income Measure is Best?"*





Source: U.S. Department of Commerce 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 3/27/2015	1 Week Ago	1 Year Ago
3-Month T-Bill	0.03	0.00	0.03
3-Month LIBOR	0.27	0.26	0.23
1-Year Treasury	0.26	0.27	0.13
2-Year Treasury	0.58	0.58	0.45
5-Year Treasury	1.42	1.41	1.72
10-Year Treasury	1.96	1.93	2.68
30-Year Treasury	2.55	2.51	3.53
Bond Buyer Index	3.52	3.52	4.43

Foreign Exchange Rates

	Friday 3/27/2015	1 Week Ago	1 Year Ago
Euro ($/€)	1.089	1.082	1.374
British Pound ($/£)	1.492	1.495	1.661
British Pound (£/€)	0.730	0.724	0.827
Japanese Yen (¥/$)	118.980	120.040	102.180
Canadian Dollar (C$/$)	1.251	1.255	1.103
Swiss Franc (CHF/$)	0.961	0.975	0.887
Australian Dollar (US$/A$)	0.778	0.778	0.926
Mexican Peso (MXN/$)	15.113	15.056	13.082
Chinese Yuan (CNY/$)	6.216	6.205	6.213
Indian Rupee (INR/$)	62.418	62.469	60.318
Brazilian Real (BRL/$)	3.232	3.231	2.259
U.S. Dollar Index	97.374	97.909	80.111

Foreign Interest Rates

	Friday 3/27/2015	1 Week Ago	1 Year Ago
3-Month Euro LIBOR	0.01	0.02	0.28
3-Month Sterling LIBOR	0.57	0.57	0.52
3-Month Canada Banker's Acceptance	1.00	0.99	1.26
3-Month Yen LIBOR	0.10	0.10	0.14
2-Year German	-0.25	-0.24	0.14
2-Year U.K.	0.40	0.40	0.67
2-Year Canadian	0.56	0.46	1.07
2-Year Japanese	0.04	0.01	0.08
10-Year German	0.21	0.18	1.54
10-Year U.K.	1.56	1.52	2.68
10-Year Canadian	1.38	1.31	2.44
10-Year Japanese	0.38	0.33	0.63

Commodity Prices

	Friday 3/27/2015	1 Week Ago	1 Year Ago
WTI Crude ($/Barrel)	49.83	45.72	101.28
Gold ($/Ounce)	1201.23	1182.63	1291.30
Hot-Rolled Steel ($/S.Ton)	475.00	491.00	639.00
Copper (¢/Pound)	277.80	277.50	303.65
Soybeans ($/Bushel)	9.66	9.52	14.38
Natural Gas ($/MMBTU)	2.62	2.79	4.58
Nickel ($/Metric Ton)	13,647	13,735	15,864
CRB Spot Inds.	472.25	468.48	538.73

Source: Bloomberg LP and Wells Fargo Securities, LLC

Next Week's Economic Calendar

	Monday 30	Tuesday 31	Wednesday 1	Thursday 2	Friday 3
U.S. Data	**Personal Income & Spending** January 0.3% & -0.2% February 0.4% & 0.1% (W) **Pending Home Sales (MoM)** January 1.7% February 0.3% (C)	**Consumer Confidence Index** February 96.4 March 93.9 (W)	**Construction Spending (MoM)** January -1.1% February -0.1% (W) **ISM Manufacturing** February 52.9 March 53.0 (W)	**Trade Balance** January -$41.8B February -$40.3B (W) **Factory Orders** January -0.2% February -0.1% (W)	**Nonfarm Payrolls** February 295K March 240K (W) **Unemployment Rate** February 5.5% March 5.5% (W)
Global Data		**Canada** **GDP** Previous (Q4) 0.3% **Chile** **Unemployment Rate** Previous (January) 6.2%	**Japan** **Tankan Survey** Previous (Q4) 12 **United Kingdom** **Manufacturing PMI** Previous (February) 54.1		

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
Mackenzie Miller	Economic Analyst	(704) 410-3358	mackenzie.miller@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
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