Economics Group

WELLS SECURITIES

MONTHLY OUTLOOK

U.S. Overview

February's stronger-than-expected employment report and upward revisions to the January data have gone a long way toward allaying fears that the global economic slowdown would pull the U.S. economy into recession. Pockets of economic weakness clearly exist, most of which are closely tied to energy production. The slowdown in the nation's factory sector is somewhat broadly based, with manufacturers struggling not only with weaker demand from the energy sector but also the effects of slower global growth, a stronger dollar and bloated inventories. The ISM manufacturing index has been below the key 50 demarcation line for the past five months, signaling a contraction in the factory sector. The latest reading saw the index rise 1.3 points to 49.5, however, suggesting these headwinds may be lessening.

Our forecast continues to call for only a late mid-cycle correction, albeit one that feels much worse in the parts of the economy that are most directly affected. Manufacturing, mining and energy production are all very capital-intensive industries that are also fairly geographically concentrated. The net result has been a few pockets of economic weakness and a much larger pull-back in GDP growth than in job growth.

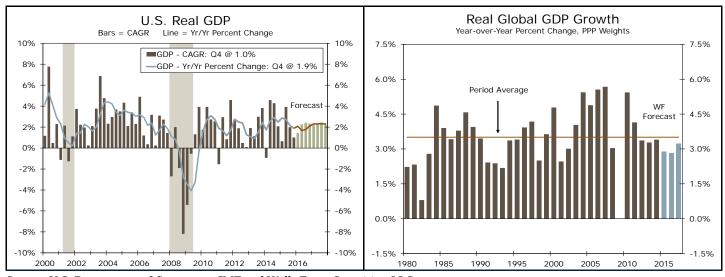
We expect real GDP to rise at just a 1.4 percent annualized pace in the current quarter, following the fourth quarter's 1.0 percent pace. Consumer spending and residential investment are carrying the load in Q1, but economic activity is expected to broaden in coming quarters, lifting GDP growth back above 2 percent for the balance of the year.

International Overview

To judge from our own client meetings, there is growing interest in hearing about whether or not the global economy could slip into recession in 2016. There is no shortage of reasons for concern. Worries abound about prospects for growth in China even with the adoption of a new growth target range there. The prospect of "Brexit"—the United Kingdom's potential exit from the European Union—casts a pall upon the outlook for economic growth across Europe. Finally, zero-interest rate policy in many foreign economies is being replaced with a negative interest rate regime. The effectiveness as well as the long-term viability of negative rates has been called into question, most recently by the Bank for International Settlements (BIS).

We do not think the global economy is headed for recession this year, although admittedly we have been gradually dialing back our 2016 global GDP forecast, which now stands at 2.8 percent. Global GDP growth of less than 2 percent is generally accepted as a workable guideline for determining global recession.

While all three of these variables (China worries, negative rates and Brexit) are consequential to the global outlook, they are not particularly impactful on the U.S. economy. As we discuss in the U.S. overview of this report, fundamentals in the U.S. economy are consistent with firming inflation and labor market growth, which we believe the Federal Reserve will find sufficient to raise its benchmark rate three times this year. Strong U.S. growth makes the global economy resilient.



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

Together we'll go far



Pessimists Take the Polar Plunge

February's stronger employment report and upward revisions to the January data were essentially a polar plunge for pessimists. After shedding their fears and jumping into the icy cold winter waters, even the most bearish participants came out with visions of Goldilocks. The big bad bear from overseas was not going to devour the U.S. economy after all, and with the spring just around the corner, better days now seem ahead.

The change in sentiment is refreshing and was sorely needed. Pessimism about U.S. economic prospects had gone somewhat overboard during the first few months of this year, fed largely on concerns about weakening economic conditions overseas and the uncertainty surround the adoption of negative interest rates in Europe and Japan. The early year slide in the equity markets was also unnerving and raised further doubts about the economy's resilience.

Amid all the worry, consumers kept on spending because more and more folks are feeling better about their employment and income prospects. Nonfarm employment growth has risen by an average of just over 200,000 jobs through the first two months of 2016, following the rapid pace of 282,000 jobs per month during the fourth quarter. With the unemployment rate down at 4.9 percent and weekly jobless claims near their postrecession lows, consumers are feeling more secure about their jobs than at any other point in this recovery. This is typically a good precursor to home buying and spending for big-ticket items, such as motor vehicles and other consumer durables.

Consumer spending certainly got off to a strong start this year and we are looking for spending to rise at a 3.3 percent annualized pace for the first quarter. Spending is up across most key categories. Motor vehicle sales are averaging about a 17.5 million unit pace, while spending at home improvement centers has been bolstered by milder-than-usual winter weather. Department stores and clothing stores should also

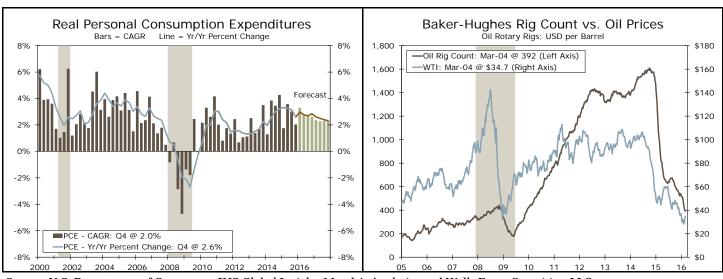
benefit from an early Easter, which will pull more spending into the first quarter.

The early spring may also bring good news to the housing sector. While most reports on housing activity have been mixed, builders have generally remained positive and production and shipments of building products have remained strong. We are looking for modest gains in residential construction this year, with single-family starts rising 9 percent and apartment construction remaining strong.

The most pressing concern for the economy continues to be the weakness in the manufacturing sector. The ISM manufacturing index has been below 50 for the past five months, signaling a decline in manufacturing activity. Previous declines in the ISM manufacturing survey this late into the business cycle have often coincided with the onset of recession. Fortunately, the manufacturing slump is showing signs of lessening. The ISM manufacturing index rose 1.3 points in February to 49.5 and factory orders also rebounded in January. While we are not looking for the factory sector to switch back to a position of strength, the manufacturing slump may be ending, which would eliminate a significant drag.

Much of the manufacturing sector's weakness stems from the effects of slower growth overseas and the stronger U.S. dollar. Lower energy prices and the dramatic pullback in energy exploration and production are also factors, particularly for producers of steel and industrial machinery. While it is still too early to determine if oil prices have bottomed out, the recent rebound to the mid-\$30/barrel range is encouraging, particularly given the sharp plunge in the rig count.

With the economic outlook looking a little less scary, the Federal Reserve is likely to continue to press forward normalizing short-term interest rates. We expect the Fed to nudge rates up by a quarter point three times this year, beginning in June.



Source: U.S. Department of Commerce, IHS Global Insight, Moody's Analytics and Wells Fargo Securities, LLC

Wells Fargo U.S. Economic Forecast																					
	Actual				Forecast						Actual		Fore	cast							
		20	14			20)15			20	16			20	17		2013	2014	2015	2016	2017
	10	2Q	3Q	40	1Q	2Q	3Q	40	10	2Q	3Q	40	10	2Q	3Q	4Q					
Real Gross Domestic Product (a)	-0.9	4.6	4.3	2.1	0.6	3.9	2.0	1.0	1.4	2.3	2.4	2.3	2.2	2.3	2.4	2.3	1.5	2.4	2.4	1.9	2.3
Personal Consumption	1.3	3.8	3.5	4.3	1.8	3.6	3.0	2.0	3.3	2.7	2.7	2.6	2.4	2.3	2.3	2.3	1.7	2.7	3.1	2.8	2.5
Business Fixed Investment	8.3	4.4	9.0	0.7	1.6	4.1	2.6	-1.9	0.3	2.5	3.3	3.5	4.7	4.7	4.9	4.8	3.0	6.2	2.9	1.4	4.2
Equipment	3.5	6.5	16.4	-4.9	2.3	0.3	9.9	-1.8	1.9	2.5	3.0	3.5	4.1	4.2	4.5	4.4	3.2	5.8	3.1	2.4	3.8
Intellectual Property Products	7.8	4.9	6.5	6.9	7.4	8.3	-0.8	1.3	3.1	6.0	5.8	5.3	4.9	4.7	4.8	4.7	3.8	5.2	5.7	3.6	5.1
Structures	19.1	-0.2	-1.9	4.3	-7.4	6.2	-7.2	-6.6	-8.0	-3.0	0.0	0.5	6.0	6.0	6.0	6.0	1.6	8.1	-1.6	-4.4	3.6
Residential Construction Government Purchases	-2.7 0.0	10.4 1.2	3.4 1.8	9.9 -1.4	10.1 -0.1	9.4 2.6	8.2 1.8	7.9 -0.1	9.0 1.0	9.0 2.1	9.0 1.8	8.5 1.7	8.5 1.2	8.5 1.0	8.0 1.0	8.0 0.9	9.5 -2.9	1.8 -0.6	8.7 0.7	8.7 1.3	8.5 1.4
									_												
Net Exports	-434.0	-443.3	-429.1	-463.6	-541.2	-534.6	-546.1	-556.8	-578.1	-603.7	-630.5	-651.8	-669.0	-682.4	-695.0	-707.4	-417.5	-442.5	-544.7	-616.0	-688.4
Pct. Point Contribution to GDP	-1.4	-0.2	0.4	-0.9	-1.9	0.2	-0.3	-0.3	-0.5	-0.6	-0.6	-0.5	-0.4	-0.3	-0.3	-0.3	0.2	-0.2	-0.6	-0.4	-0.4
Inventory Change	36.9 -1.3	77.1 1.1	79.9 0.0	78.2 0.0	112.8 0.9	113.5 0.0	85.5 -0.7	81.7 -0.1	64.0 -0.4	65.0 0.0	70.0 0.1	70.0 0.0	64.0 -0.1	60.0 -0.1	61.0 0.0	55.0 -0.1	61.4 0.0	68.0 0.0	98.4 0.2	-0.2	60.0 0.0
Pct. Point Contribution to GDP																					
Nominal GDP (a)	0.6	6.9	6.0	2.2	0.8	6.1	3.3	2.0	2.3	4.1	4.7	4.5	4.0	4.2	4.4	4.6	3.1	4.1	3.4	3.4	4.3
Real Final Sales	0.4	3.5	4.3	2.1	-0.2	3.9	2.7	1.1	2.1	2.3	2.3	2.4	2.4	2.4	2.4	2.4	1.4	2.4	2.2	2.2	2.4
Retail Sales (b)	2.2	4.5	4.4	4.3	2.6	1.9	2.3	1.9	3.7	3.1	3.0	3.7	4.0	4.1	4.2	4.2	3.9	3.9	2.2	3.4	4.2
Inflation Indicators (b)																					
PCE Deflator	1.3	1.7	1.6	1.1	0.2	0.3	0.3	0.5	1.2	1.1	1.3	1.8	2.0	2.0	1.9	2.0	1.4	1.4	0.3	1.3	1.9
Consumer Price Index	1.4	2.0	1.8	1.2	-0.1	0.0	0.1	0.4	1.3	1.2	1.5	1.9	2.3	2.3	2.2	2.2	1.5	1.6	0.1	1.5	2.2
"Core" Consumer Price Index	1.6	1.9	1.8	1.7	1.7	1.8	1.8	2.0	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.1	1.8	1.7	1.8	2.1	2.1
Producer Price Index (Final Demand)	1.4	2.0	1.8	1.2	-0.5	-0.8	-1.0	-1.2	0.1	0.4	0.8	1.8	2.2	2.3	2.3	2.2	1.4	1.6	-0.9	0.8	2.2
Employment Cost Index	1.8	2.0	2.2	2.3	2.6	2.0	2.0	2.0	1.9	2.3	2.4	2.5	2.6	2.6	2.7	2.8	1.9	2.1	2.1	2.3	2.7
Real Disposable Income (a)	4.0	3.0	2.7	4.7	3.9	2.6	3.2	2.5	3.4	2.8	2.8	2.8	2.7	2.7	2.6	2.6	-1.4	2.7	3.4	2.9	2.7
Nominal Personal Income (b)	3.9	4.2	4.5	5.2	4.5	4.5	4.5	4.1	4.5	4.4	4.4	4.7	4.6	4.5	4.4	4.4	1.1	4.4	4.4	4.5	4.5
Industrial Production (a)	3.6	5.7	3.9	4.7	-0.3	-2.3	2.7	-3.3	1.6	2.1	1.1	2.2	2.6	2.2	1.1	2.5	1.9	3.7	1.3	0.6	2.1
Capacity Utilization	77.3	78.0	78.3	78.8	78.4	77.7	77.9	77.0	77.7	78.4	78.6	78.7	78.5	78.3	78.2	78.3	76.7	78.1	77.8	78.3	78.3
Corporate Profits Before Taxes (b)	-3.6	1.2	5.8	3.4	4.6	0.6	-5.1	2.3	2.6	2.6	2.4	2.4	2.4	2.3	2.2	2.2	2.0	1.7	0.5	2.5	2.3
Corporate Profits After Taxes	-7.5	-2.6	4.9	2.7	4.7	-0.6	-8.2	2.0	1.9	1.8	1.9	1.8	1.6	1.5	1.5	1.5	1.2	-0.6	-0.7	1.8	1.5
Federal Budget Balance (c)	-241	47	-117	-177	-263	123	-123	-216	- 110	-45	- 205	- 180	-180	-40	- 190	- 160	-680	- 484	-439	-575	-590
Current Account Balance (d)	-96.4	-92.0	- 97.9	- 103.1	-118.3	-111.1	-124.1	-113.0	-115.0	-120.0	-130.0	- 140.0	-145.0	-150.0	-155.0	-155.0	-376.8	-389.5	-466.5	-505.0	-605.0
Trade Weighted Dollar Index (e)	76.9	75.9	81.3	85.1	92.1	89.9	92.3	94.5	92.5	92.5	94.0	96.0	97.3	98.8	98.8	98.0	75.9	78.5	91.1	93.8	98.2
Nonfarm Payroll Change (f)	209	276	245	274	190	251	192	282	203	185	185	180	175	170	165	160	193	251	229	188	168
Unemployment Rate	6.7	6.2	6.1	5.7	5.6	5.4	5.2	5.0	4.9	4.8	4.7	4.6	4.5	4.5	4.4	4.4	7.4	6.2	5.3	4.7	4.5
Housing Starts (g)	0.93	0.98	1.03	1.06	0.98	1.16	1.16	1.13	1.16	1.20	1.20	1.22	1.23	1.24	1.25	1.26	0.92	1.00	1.11	1.20	1.25
Light Vehicle Sales (h)	15.8	16.5	16.7	16.8	16.7	17.1	17.8	17.8	17.5	17.4	17.3	17.1	17.1	17.0	16.9	16.8	15.5	16.4	17.3	17.3	17.0
Crude Oil - Brent - Front Contract (i)	107.6	109.5	103.7	77.3	55.6	63.9	51.6	45.0	30.0	34.0	43.0	46.0	47.0	51.0	57.0	52.0	108.4	99.5	54.0	38.3	51.8
Quarter-End Interest Rates (j)																					
Federal Funds Target Rate	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	0.25	0.25	0.27	0.88	1.88
3 Month LIBOR	0.23	0.23	0.24	0.26	0.27	0.28	0.33	0.61	0.70	0.95	1.20	1.45	1.70	1.95	2.20	2.45	0.27	0.23	0.32	1.08	2.08
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.50	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	3.25	3.25	3.27	3.88	4.88
Conventional Mortgage Rate	4.34	4.16	4.16	3.86	3.77	3.98	3.89	3.96	3.90	3.98	4.06	4.16	4.29	4.36	4.41	4.55	3.98	4.17	3.85	4.02	4.40
3 Month Bill	0.05	0.04	0.02	0.04	0.03	0.01	0.00	0.16	0.37	0.67	0.90	1.18	1.33	1.59	1.88	2.15	0.06	0.03	0.05	0.78	1.74
6 Month Bill	0.07	0.07	0.03	0.12	0.14	0.11	0.08	0.49	0.51	0.69	0.95	1.20	1.41	1.64	1.97	2.21	0.09	0.06	0.17	0.84	1.81
1 Year Bill 2 Year Note	0.13	0.11	0.13 0.58	0.25	0.26 0.56	0.28	0.33	0.65 1.06	0.58	0.84 1.10	1.02	1.33 1.59	1.52 1.82	1.79 1.98	2.03	2.27	0.13 0.31	0.12 0.46	0.32	0.94	1.90 2.05
5 Year Note	1.73	1.62	1.78	1.65	1.37	1.63	1.37	1.76	1.47	1.10	1.36 1.72	1.85	1.82	2.06	2.16	2.29	1.17	1.64	1.53	1.65	2.05
10 Year Note	2.73	2.53	2.52	2.17	1.94	2.35	2.06	2.27	1.47	2.03	2.12	2.23	2.39	2.48	2.16	2.33	2.35	2.54	2.14	2.08	2.13
30 Year Bond	3.56	3.34	3.21	2.75	2.54	3.11	2.87	3.01	2.80	2.85	2.12	2.92	2.98	3.03	3.07	3.23	3.45	3.34	2.84	2.86	3.08
	5.50	5.54	0.21	2.70	2.54	5.11	2.07	5.01	2.00	2.00	2.07	/2	2.70	5.05	5.07	5.25	5.45	0.54	2.54	2.00	5.55

Forecast as of: March 9, 2016

Notes: (a) Compound Annual Growth Rate Quarter-over-Quarter

(e) Federal Reserve Major Currency Index, 1973=100 - Quarter End

(f) Average Monthly Change

(j) 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

⁽b) Year-over-Year Percentage Change
(c) Quarterly Sum - Billions USD; Annual Data Represents Fiscal Yr.
(d) Quarterly Sum - Billions USD

 ⁽i) Average wommy change
 (g) Millions of Units - Annual Data - Not Seasonally Adjusted
 (h) Quarterly Data - Average Monthly SAAR; Annual Data - Actual Total Vehicles Sold
 (i) Quarterly Average of Daily Close

Economics Group

International Outlook Wells Fargo Securities, LLC

China Worries

Worries about slower growth in China and its impact on the broader economy have been one of the main themes of 2016. The most recent development about the Chinese economy attracting attention at present is the announcement coming out of the recent National People's Congress of new growth targets, which are now expressed as a range of 6.5 to 7.0 percent in 2016 and at least 6.5 percent in subsequent years. The announcement was met by skepticism in some quarters as it did not include plans about what Chinese authorities might do to secure that such a goal is realized. We are not making any sweeping revisions to our outlook on the announcement. We still expect the slowdown in overall Chinese real GDP growth to continue. That said, we remain of the view that the downward adjustment will be gradual and orderly. Chinese policymakers have a great deal of flexibility that should allow them to shore up economic growth should downward pressure intensify, so the absence of specific measures is something we find neither worrying nor surprising.

The concern about potentially slower growth in China and its impact on the global economy is warranted, but somewhat overstated in our view. U.S. exports to China constitute about 7 percent of all U.S. exports and less than 1 percent of U.S. GDP. The rest of Asia sends about 13 percent of its total exports to China. However, the best way to measure the true economic effect that China has on other countries in the Asian region is via the contribution that its final domestic demand (final spending by Chinese consumers, businesses and the government) makes to value added in those other economies. By this measure, the exposure is even smaller.

Brexit

"Brexit" fears have been mounting since Prime Minister David Cameron scheduled a referendum on the issue for June 23. In the wake of the announcement, the British pound subsequently fell to a seven-year low and has not meaningfully retraced those losses as uncertainty mounts about implications of a potential British exit from the European Union (EU).

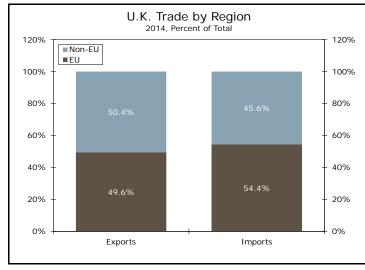
It is impossible to quantify the exact effects Brexit would have on the U.K. economy and there is not even a historical precedent we can use for guidance. However, extensive trade ties (see graph on left), cross-border investment and the free flow of individuals between the United Kingdom and EU member countries could be at risk. London's status as the financial capital of Europe could also be in jeopardy. Whatever the outcome, any negotiations in the aftermath would likely be lengthy and challenging. Should Brexit occur, the outlook for economic activity in the United Kingdom is highly uncertain.

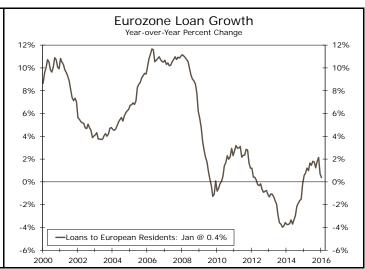
Negative Rates and the Uncertainty Risk

Since the middle part of last year, four central banks in Europe (including the ECB) have taken policy rates into negative territory. In January, the Bank of Japan joined in by introducing a negative deposit rate for banks on new deposits. The objective is to induce the banking sector in these economies to lend more. Increased bank lending could speed the velocity of money and eventually underpin inflation. The record is mixed and loan growth in Europe is slowing (bottom right chart). The Bank for International Settlements this week said in a paper that "there is great uncertainty about the behavior of individuals and institutions if rates were to decline further into negative territory or remain negative for a prolonged period." At least for the near term, central banks appear willing to explore options past the zero bound. It will become increasingly important to monitor the effects on the financial systems and, more broadly, the real economies of these countries.

U.S. Economy Is an Anchor to Windward

Prospects for the U.S. economy remain relatively bright and that helps the global economy. Growth is somewhat below potential, yet still sufficient to bring both labor and inflation to a point that the Federal Reserve will be raising rates.





Source: IHS Global Insight and Wells Fargo Securities, LLC

Wells Fargo International Economic Forecast											
(Year-over-Year Percent Change)											
		GDP			CPI						
	2015	2016	2017	2015	2016	2017					
Global (PPP Weights)	2.9%	2.8%	3.2%	3.3%	3.1%	3.5%					
Global (Market Exchange Rates)	2.8%	2.6%	3.1%	n/a	n/a	n/a					
Advanced Economies ¹	2.0%	1.7%	2.2%	0.2%	0.9%	1.8%					
United States	2.4%	1.9%	2.3%	0.1%	1.5%	2.2%					
Eurozone	1.5%	1.6%	2.0%	0.0%	0.1%	1.2%					
United Kingdom	2.2%	1.7%	2.0%	0.0%	0.7%	1.6%					
Japan	0.5%	0.0%	0.7%	0.8%	0.3%	1.1%					
Korea	2.6%	2.1%	3.0%	0.7%	1.4%	2.0%					
Canada	1.2%	2.0%	2.5%	1.1%	1.4%	1.9%					
Developing Economies ¹	3.7%	3.9%	4.2%	6.1%	5.2%	5.3%					
China	6.9%	6.3%	5.8%	1.4%	1.3%	1.7%					
India ²	7.2%	7.5%	7.2%	6.0%	5.0%	5.4%					
Mexico	2.5%	2.4%	2.8%	2.7%	3.0%	3.0%					
Brazil	-3.8%	-2.5%	2.8%	9.0%	9.7%	8.5%					
Russia	-4.0%	-0.6%	1.6%	15.6%	7.4%	6.1%					

Forecast as of: March 9, 2016

²Forecasts Refer to Fiscal Year

Wells Fargo International Interest Rate Forecast												
(End of Quarter Rates)												
3-Month LIBOR 10-Year Bond												
2016				20)17	2016				2017		
	Q1	Q2	Q3	Q4	Q1	Q2	Q1	Q2	Q3	Q4	Q1	Q2
U.S.	0.70%	0.95%	1.20%	1.45%	1.70%	1.95%	1.95%	2.03%	2.12%	2.23%	2.39%	2.48%
Japan	-0.02%	-0.10%	-0.15%	-0.25%	-0.25%	-0.25%	-0.05%	-0.10%	-0.10%	-0.05%	0.00%	0.02%
Euroland ¹	-0.25%	-0.27%	-0.30%	-0.30%	-0.30%	-0.25%	0.20%	0.25%	0.30%	0.40%	0.50%	0.60%
U.K.	0.60%	0.60%	0.60%	0.70%	0.95%	0.95%	1.45%	1.50%	1.60%	1.70%	2.00%	2.10%
Canada ²	0.88%	0.88%	0.88%	0.92%	1.00%	1.25%	1.25%	1.35%	1.40%	1.50%	1.70%	1.80%

Forecast as of: March 9, 2016

Source: Wells Fargo Securities, LLC

¹Aggregated Using PPP Weights

¹ 10-year German Government Bond Yield

² 3-Month Canada Bankers' Acceptances

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
Anika R. Khan	Senior Economist	(704) 410-3271	anika.khan@wellsfargo.com
Eugenio J. Alemán, Ph.D.	Senior Economist	(704) 410-3273	eugenio.j.aleman@wellsfargo.com
Azhar Iqbal	Econometrician	(704) 410-3270	azhar.iqbal@wellsfargo.com
Tim Quinlan	Senior 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
Julianne Causey	Economic Analyst	(704) 410-3281	julianne.causey@wellsfargo.com
Donna LaFleur	Executive Assistant	(704) 410-3279	donna.lafleur@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. Wells Fargo Securities, LLC wells Fargo Securities, LLC wells Fargo Securities, LLC 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 with respect to the purchase or sales of any security or as personalized investment wells Fargo Securities, LLC is a separate legal entity and distinct from affiliated banks and is a wholly owned subsidiary of Wells Fargo & Company © 2016 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

