March 22, 2019

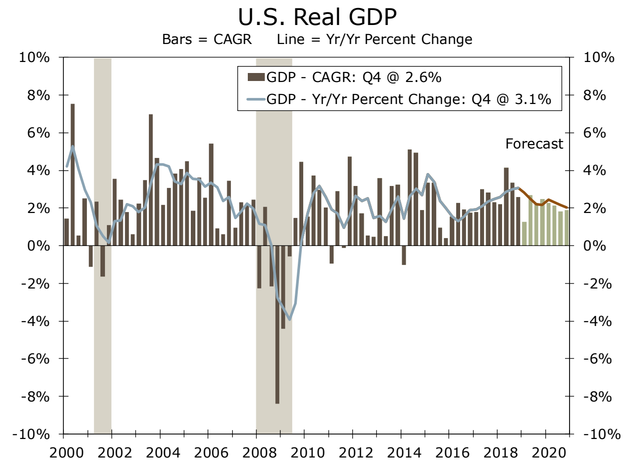
Economics Group

Weekly Economic & Financial Commentary

U.S. Review

A Wait-and-See Approach

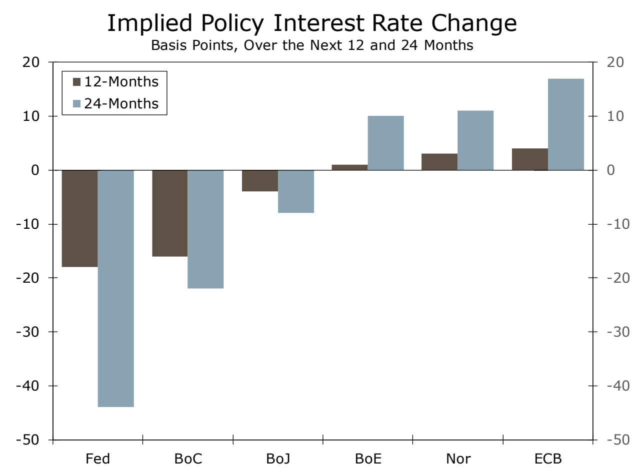
- The unanimous decision by the FOMC to keep rates unchanged this week was widely expected, but the committee's increased caution regarding the outlook reaffirmed its wait-and-see approach to monetary policy.
- In other news, the Leading Economic Index for February suggests economic growth will continue, but with the positive contributions to the index getting smaller on trend, the index suggests a moderation in the pace of growth.



Global Review

Brexit Uncertainties Persist, Norges Bank Goes Hawkish

- As the end-March deadline approaches, Brexit developments continue to dominate headlines. U.K. Prime Minister Theresa May has stated her intention to seek a delay to the deadline, while U.K. parliament might reconvene again to vote on May's deal. Amid Brexit, the Bank of England held policy rates steady this week as uncertainty is likely to persist for the time being.
- The Central Bank of Norway opted to raise interest rates at this week's monetary policy meeting and suggested more hikes may be coming. As other major central banks have become more dovish, Norges Bank has undertaken a more hawkish path as oil prices recover and the domestic economy improves.



Wells Fargo U.S. Economic Forecast

	Actual 2018				Forecast 2019				Actual			Forecast	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	2016	2017	2018	2019	2020
Real Gross Domestic Product [1]	2.2	4.2	3.4	2.6	1.3	2.7	2.3	2.5	1.6	2.2	2.9	2.4	2.2
Personal Consumption	0.5	3.8	3.5	2.8	1.7	2.6	2.4	2.5	2.7	2.5	2.6	2.6	2.2
Inflation Indicators [2]													
PCE Deflator	1.9	2.2	2.2	1.9	1.5	1.7	1.8	2.0	1.1	1.8	2.0	1.8	2.2
Consumer Price Index	2.2	2.7	2.6	2.2	1.6	1.8	2.0	2.2	1.3	2.1	2.4	1.9	2.5
Industrial Production [1]	2.5	5.2	4.9	4.6	-0.3	2.5	1.2	2.0	-1.9	1.6	4.0	2.4	1.7
Corporate Profits Before Taxes [2]	5.9	7.3	10.4	6.7	3.9	6.6	6.7	5.1	-1.1	3.2	7.6	5.6	0.2
Trade Weighted Dollar Index [3]	86.3	90.0	90.1	91.8	92.3	92.3	91.5	90.8	91.5	91.1	89.0	91.7	88.4
Unemployment Rate	4.1	3.9	3.8	3.8	3.9	3.7	3.7	3.6	4.9	4.4	3.9	3.7	3.5
Housing Starts [4]	1.32	1.26	1.23	1.15	1.25	1.26	1.27	1.28	1.17	1.20	1.24	1.27	1.29
Quarter-End Interest Rates [5]													
Federal Funds Target Rate	1.75	2.00	2.25	2.50	2.50	2.50	2.75	2.75	0.52	1.13	1.96	2.63	2.69
Conventional Mortgage Rate	4.44	4.57	4.63	4.64	4.40	4.55	4.65	4.70	3.65	3.99	4.54	4.58	4.65
10 Year Note	2.74	2.85	3.05	2.69	2.80	2.95	3.05	3.10	1.84	2.33	2.91	2.98	3.05

Forecast as of: March 13, 2019
[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: Federal Reserve Board, IHS Markit, U.S. Department of Commerce, U.S. Department of Labor and Wells Fargo Securities

Inside

U.S. Review

A Wait-and-See Approach

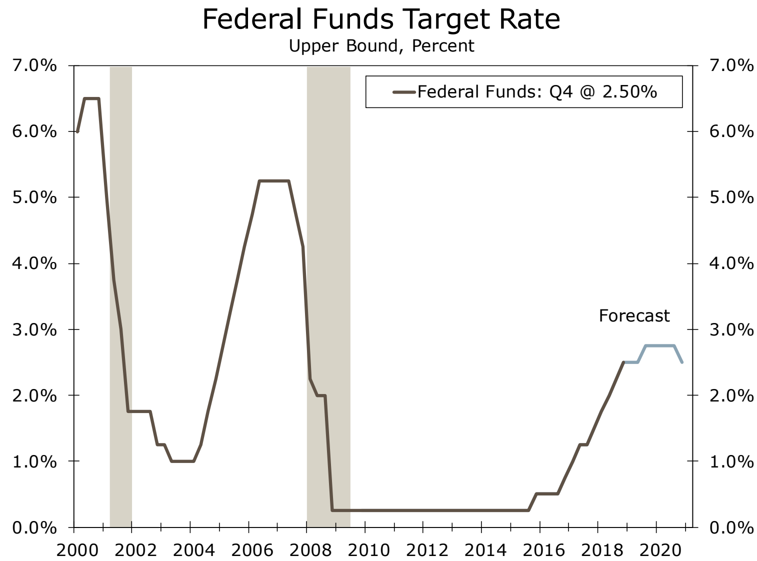
The two-day meeting of the Federal Open Market Committee (FOMC) was the focal point this week, concluding with a unanimous decision to keep the range of the federal funds rate unchanged between 2.25% and 2.50%. This decision was widely expected by financial markets, but the committee's increased caution regarding the outlook reaffirmed its wait-and-see approach to monetary policy.

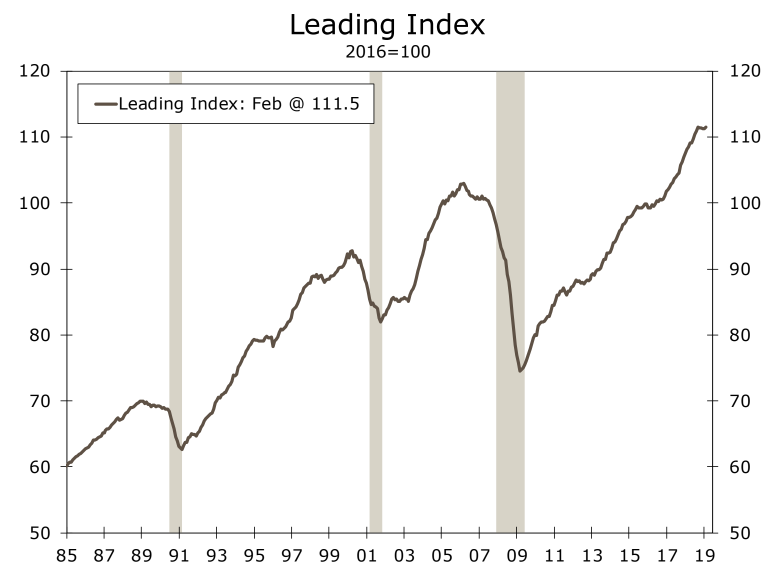
Perhaps expected, equity markets gained at the onset of the announcement, but markets soon gave back most of those gains after fully digesting the breadth of the FOMC's decision. The committee downgraded its assessment of the economy, with officials' median projection for growth this year dropping to 2.1% from 2.5% previously. With this more reserved outlook, the committee scaled back its expectations regarding tightening and now looks to be on hold for the rest of this year. Does this suggest the FOMC believes it has reached its neutral policy rate? Taking the dot plot at face value would suggest there is still a *modest* preference to hike rates 25 bps next year. But, given the patient tone of the FOMC and its data-dependent approach, it is remains a close call on if the next move would be a hike or a cut.

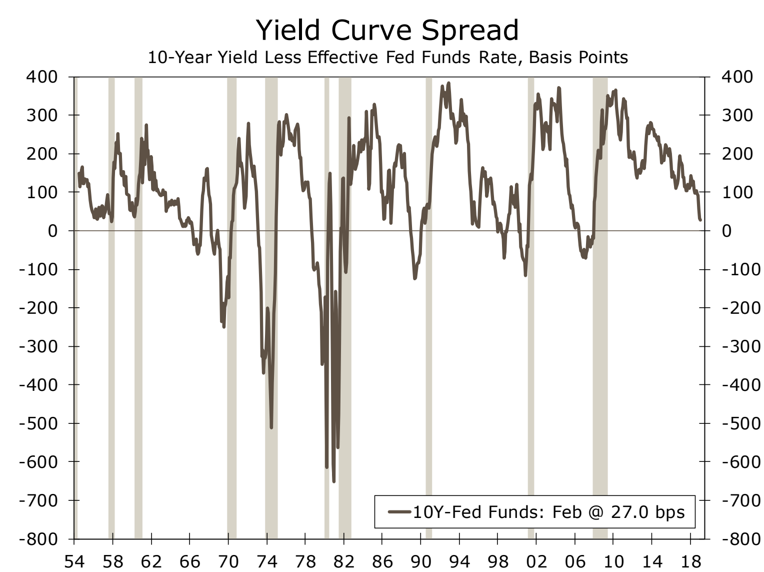
Our most recent forecast looks for the Fed to hike rates 25 bps later this year. Markets had previously priced in a *low probability of a hike* this year, but after this week's meeting the tone among markets shifted, with the market implied probability of a *cut* in late 2019 jumping to about 60%. Although a rate hike in 2019 is still possible, the committees' communication this week suggests that the risk to our forecast is skewed to the downside. We have been looking for a step-down in growth this year for some time now, and as highlighted in the committees' statement, more recent data around consumer spending and business fixed investment suggest such a moderation in growth will unfold. For more detail regarding the FOMC decision, please see our Interest Rate Watch on page 6.

Besides the FOMC meeting, we also learned that the Leading Economic Index rose 0.2% in February. While the index continues to suggest a solid pace of growth, the positive contributions to the index have been getting smaller on trend suggesting some temperance. This is clearly seen in the interest rate spread component, as the spread between the 10-year Treasury and fed funds rate has continued to fall, although it has not fallen into negative territory. If—*or perhaps when*—the yield curve inverts, market apprehension of a recession will heighten. But, while we look for growth to moderate, we think financial markets may be underestimating near-term growth.

Both upside and downside risks to the outlook persist. Perhaps one of the largest of these risks remains the outcome of trade negotiations between the United States and China. A new round of talks are set to take place in Beijing next week, with the hopes of a deal by the end of April. But, President Trump said this week that tariffs on Chinese goods may remain in place for a "substantial period of time," which only increases uncertainty around the impact to economic growth. We will continue to monitor these developments as they arise and adjust our forecast as necessary.







Source: Bloomberg LP, Federal Reserve Board, The Conference Board and Wells Fargo Securities

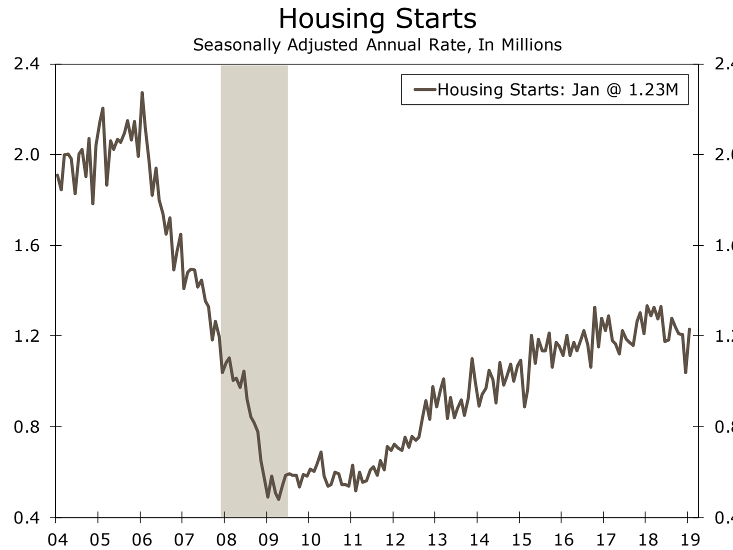
Housing Starts • Tuesday

Next week, we get a look at the extent to which the Fed's dovish pivot has fed through to the housing market as we enter the spring buying season. The announcement of the "pause" in December spurred a 50 bps plunge in mortgage rates, which appears to have been just in time to stem the slide in residential activity, as housing starts rebounded 18.6% in January after the 14% drop in December. The jump in single-family starts last month broke a string of four consecutive declines. With permits running 15% ahead of starts, we expect to see a continued modest rebound through the spring.

Moderating home price appreciation and firming mortgage applications and builder confidence should boost new home sales, for which we also receive February data next week. As a primary transmission mechanism for monetary policy, the housing market will be closely watched this spring for clues as to the efficacy—and sustainability—of the Fed's new stance.

Previous: 1,230K **Wells Fargo: 1,201K**

Consensus: 1,210K



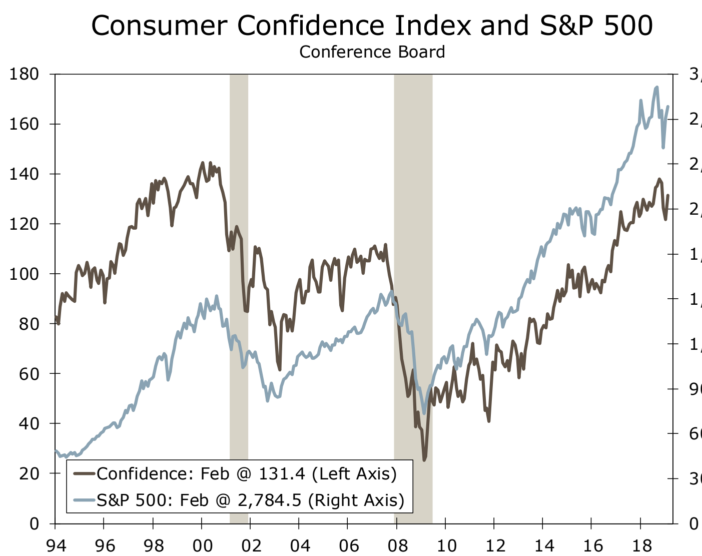
Consumer Confidence • Tuesday

Consumer confidence stabilized last month as the government shutdown and the equity market sell-off retreated further in the rear view mirror. While off the peak of 137.9 from last October, the index reading of 131.4 remains elevated amid a very strong labor market and accelerating wages. As financial markets and consumers digest the Fed's new policy stance, their expectations for future conditions will drive the outlook for personal consumption.

Such elevated readings of consumer confidence are consistent with robust growth in personal consumption, which explains our surprise at the 0.6% drop in real spending reported in December. We caution against reading too much into this one figure or the alarming December retail sales report. Real PCE rose a stronger-than expected 2.8% in Q4; going forward, we expect a moderation rather than a decline. On Friday, we get January spending data, which should reflect a more moderate pace of growth from the consumer sector.

Previous: 131.4 **Wells Fargo: 131.8**

Consensus: 132.0



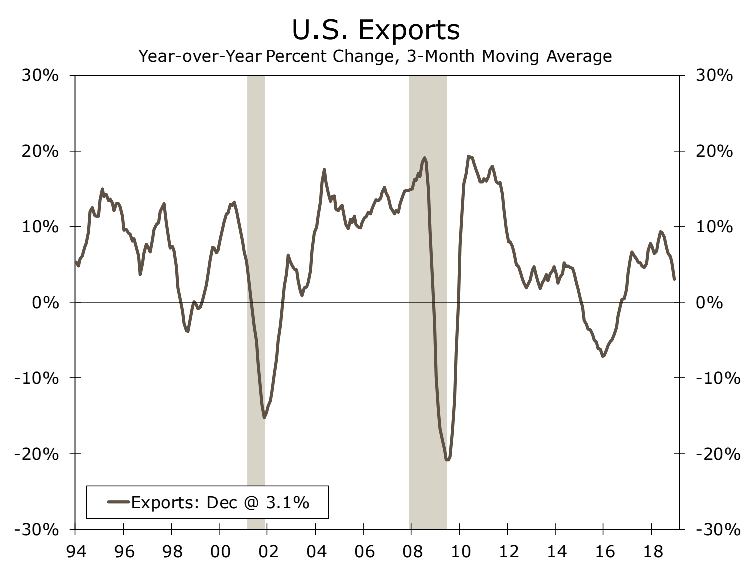
Trade Balance • Wednesday

Slowing global growth and surprisingly resilient domestic demand pose a challenging backdrop for the U.S. trade balance. Last month, the deficit widened to a 10-year high of $59.8 billion, as imports surged and exports fell for the third consecutive month. Systemic global uncertainty surrounding the trade environment as well as country-specific slowdowns in major trading partners China, Japan and Germany should eat into global demand for the foreseeable future, weighing on the U.S. trade balance and overall GDP growth. U.S. trade representatives will be in Beijing on Thursday and Friday as the two countries continue to negotiate toward a potential deal.

Net exports were originally reported to have subtracted 0.2 percentage points off of growth in the fourth quarter, but revisions to the national accounts data released next Thursday will likely bump up the drag to 0.3 percentage points.

Previous: -$59.8B **Wells Fargo: -$58.4B**

Consensus: -$57.3B



Source: U.S. Department of Commerce, The Conference Board and Wells Fargo Securities

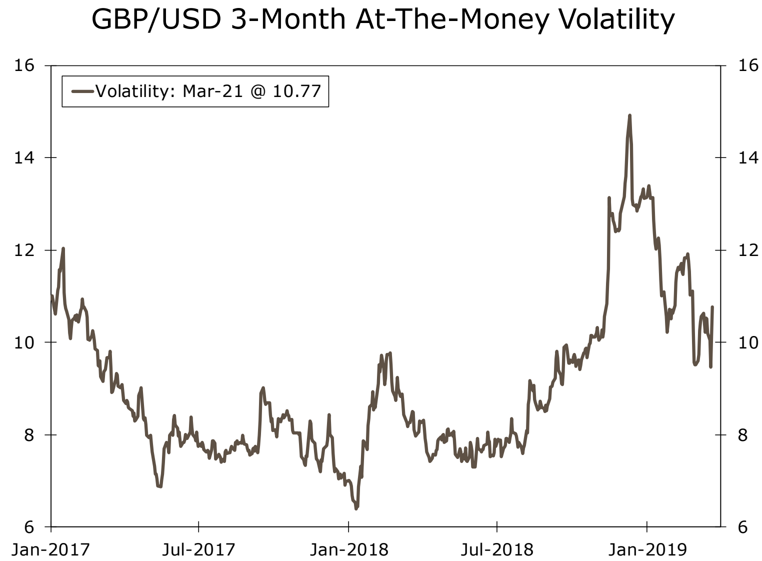
Global Review

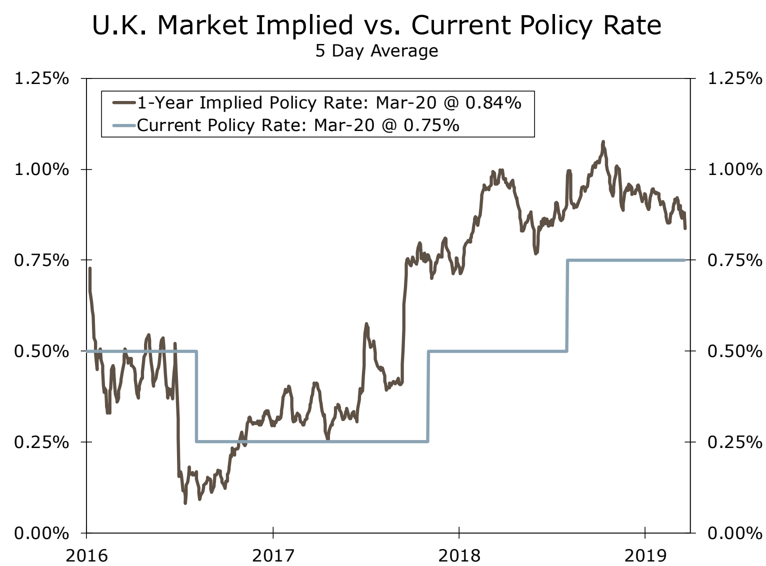
See "EU" Later? Not So Fast.

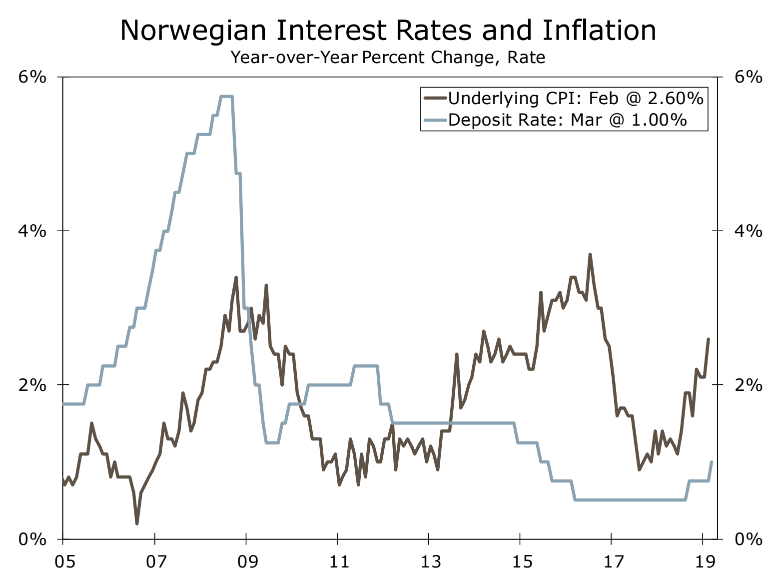
With a little over a week before the U.K.'s current deadline to leave the EU, Brexit developments have again dominated headlines this week. While the situation between the U.K. and the EU is very fluid and susceptible to frequent change, at the current juncture, U.K. Prime Minister Theresa May has formally signaled her intention to ask the EU for a short extension of the Article 50 deadline to June 30. As expected, the EU has pushed back on this request, granting May only a two week extension of Article 50. During these two weeks, May must get members of parliament to approve her current Brexit deal. If she cannot gather U.K. parliament support, the EU has indicated May will have until April 12 to decide whether the U.K. leaves the EU with no-deal or must formally request a much longer extension of the deadline, with commentary from EU officials suggesting a possible extension of up to a year. These new developments have significantly increased the risk of a no-deal Brexit, while a longer extension of the deadline makes options such as a leadership challenge and second referendum more likely as well. As Brexit developments continue to unfold, the British pound is likely to remain quite volatile. Despite a recent decline, we expect volatility in the pound to pick up as any Brexit votes will likely be contentious.

Among the midst of Brexit, the Bank of England (BoE) met on Thursday to decide monetary policy. As expected, the BoE left policy rates unchanged as the uncertainty regarding the outcome of Brexit lingers over the economy. Despite a more dovish policy stance of global central banks, markets are still implying the BoE will look to raise rates over the next few years. As of now, markets are pricing in about 1 bp of rate hikes in 12 months, and about 11 bps over a two-year horizon. While we share a similar outlook for higher interest rates, we believe the BoE will look to be more aggressive in tightening monetary policy, with our forecast calling for a 25 bps hike in the third quarter of this year and another hike in Q1-2020. Our primary rationale continues to be centered on our view that the U.K. will come to a Brexit agreement and an orderly exit from the EU is imminent. With the domestic economy resilient and performing relatively well, an orderly exit should remove the majority of the uncertainty hanging over the U.K. economy and should provide the BoE with sufficient rationale for raising policy rates.

Aside from the BoE, a few other major foreign central banks decided monetary policy this week, with the central bank of Norway being the most notable. In response to recently higher oil prices and an improving domestic economy, Norges Bank opted to hike its benchmark deposit rate 25 bps to 1%, up from 0.75%. This is the first policy rate hike from the central bank of Norway since August 2018, and marks a diverging path of monetary policy from the rest of the developed world as major central banks continue to suggest steady monetary policy for the time being. Policymakers from Norges Bank also suggested that interest rates may increase again in the second half of this year as oil prices continue to recover, the domestic economy continues to strengthen and inflation remains above the central bank's target rate.







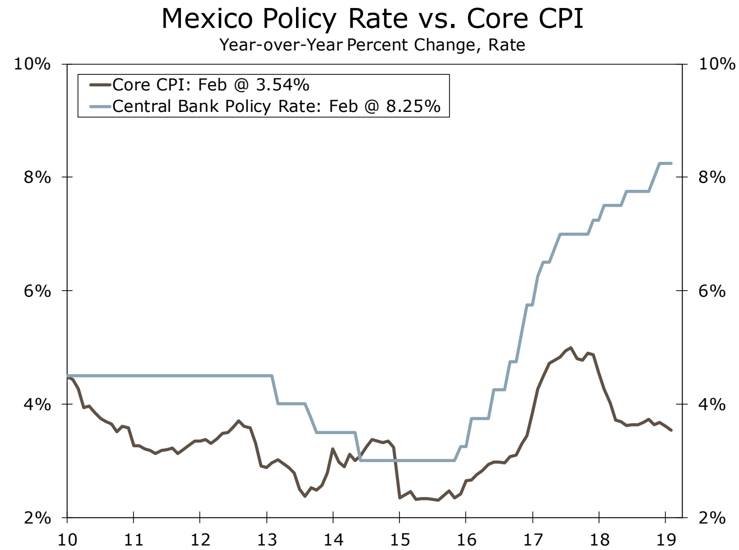
Source: Bloomberg LP, Datastream and Wells Fargo Securities

Central Bank of Mexico Decision • Thursday

Last year, the central bank of Mexico maintained a relatively hawkish stance on monetary policy, raising interest rates four times over the course of 2018. The combination of hawkish global central banks, along with an unstable currency, were likely the most influential factors in the central bank's decision to raise policy rates. However, as global monetary policy has become more benign and the peso has stabilized, the central bank of Mexico is likely to remain on hold in the short-term. In fact, Mexico's economy slowed noticeably in 2018, while this sluggish momentum has carried into 2019 as well. As a result, the central bank may look to reverse course and cut policy rates in an effort to reignite growth and inflation. Markets share a similar outlook as well and are currently pricing in two full rate cuts from the central bank over the next year. While we expect the central bank to keep rates steady next week, we anticipate the tone to be more dovish in nature, suggesting cuts may be on the horizon.

Previous: 8.25%

Consensus: 8.25%



Argentina Economic Activity • Thursday

Following last year's currency crisis and extreme tightening of monetary policy, Argentina's economy fell into a deep recession. While we expected the economy to show signs of bottoming out by now, economic activity has not recovered and continues to underperform expectations. In February, economic activity contracted by 7% year-over-year, a much larger decline than consensus forecasts had suggested. The worse-than-expected data have put renewed downward pressure on the peso once again, and with CPI inflation recently hitting a new high, weak economic activity in March may push the peso towards an all-time low and extend Argentina's recession. Despite soft economic activity, authorities have taken adequate steps toward curing Argentina's domestic imbalances. This is evidenced by the IMF applauding the administration's efforts towards achieving a balanced budget, while disbursing another US$10.8B to the government to ensure economic stabilization.

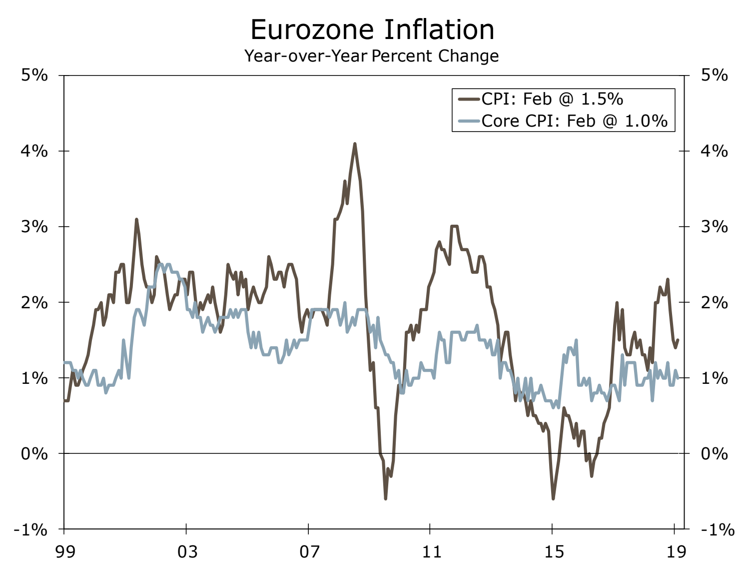
Previous: -7.0% (Year-over-Year)

Eurozone CPI Inflation • Friday

At its latest meeting, the ECB made significant downward revisions to its forecasts for both GDP growth and inflation. On the inflation side, the ECB cut its outlook in 2019 to 1.2% year-over-year, down from a previous forecast of 1.6%, while also cutting its forecasts in 2020 and 2021. In an effort to stimulate growth and inflation dynamics across the broader European economy, the ECB introduced a new round of targeted long-term refinancing operations (TLTROs) aimed at encouraging commercial banks to lend to the private sector. Along with the forecast revisions and TLTRO announcement, the ECB also changed its forward guidance to suggest policy rates will remain on hold through the end of 2019. We share a similar outlook, with our forecast now calling for a rate hike in March 2020, as growth and inflation are likely to remain relatively subdued for the time being. Any indications that CPI inflation is still slowing could push back the timing again for an ECB policy rate hike.

Previous: 1.5% **Wells Fargo: 1.3%**

Consensus: 1.5% (Year-over-Year)



Source: Bloomberg LP and Wells Fargo Securities

Interest Rate Watch

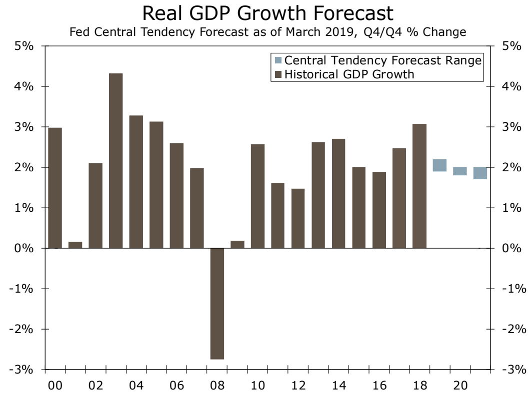
Fed on Hold Through 2019?

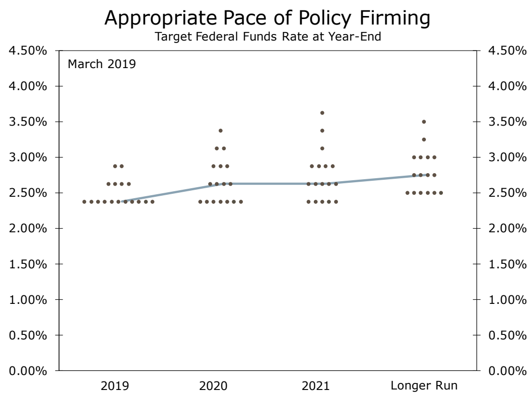
As universally expected, the Federal Open Market Committee (FOMC) voted unanimously on March 20 to keep the range for the fed funds rate between 2.25% to 2.50%. That said, the announcement was not without consequence. For starters, the FOMC downgraded its assessment of the current state of the economy, saying that "growth of economic activity has slowed from its solid rate in the fourth quarter." Furthermore, it shaved down its GDP growth forecast for 2019 and 2020 (top chart).

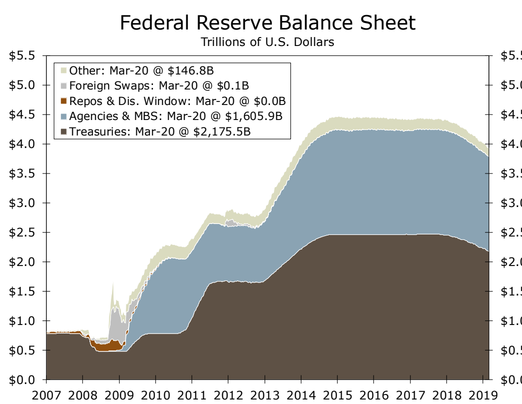
More consequentially, the committee indicated it may not raise rates any further this year. In December, the median FOMC forecaster projected 50 bps of tightening in 2019 and another 25 bps rate hike in 2020. The median forecaster now believes that the FOMC will keep the target range for the fed funds rate unchanged at 2.25% to 2.50% for the rest of 2019 (middle chart). The median forecast of one 25 bps rate hike next year remains in the forecast, but seven of the 17 FOMC members think that rates will be on hold next year as well. In other words, the forecast of a rate hike next year is a close call.

The committee also said that it will slow the pace at which its balance sheet is shrinking, and that it will end the runoff of Treasury securities altogether in October. As we have been writing for some time, the Fed's balance sheet will be elevated for the foreseeable future. Furthermore, it will continue to hold trillions of dollars of Treasury securities, which, everything else equal, should keep long-term interest rates lower than they otherwise would be.

Our most recent forecast, which was compiled earlier this month, looks for the Fed to hike rates by 25 bps later this year. We expected that the FOMC would then remain on hold until the end of 2020, when we forecasted that it would cut rates by 25 bps. Although another rate hike in 2019 is still possible, the FOMC's announcement this week means that the risk to our current forecast is skewed to the downside. We will continue to monitor incoming data to determine whether we need to adjust our forecast for the fed funds rate.







Source: U.S. Department of Commerce, Federal Reserve Board, IHS Markit and Wells Fargo Securities

Credit Market Insights

Foreigners Flee U.S. Equities

Data released from the U.S. Treasury showed foreign investors fleeing U.S. equities in January as the stock market volatility continued into the new year. Foreigners offloaded a net $31.2 billion in U.S. equities, the largest decline since September 2015, when fears about the Chinese economy caused another stock market swoon. This large January decline came on the heels of an $18.2 billion drop in foreign equity holdings in December.

The sharp declines in December/January were part of a larger trend that has seen foreigners reducing their holdings of U.S. equities. Over the past 12 months, foreign holdings of U.S. equities have declined a net $187 billion, the largest on record.

Where then has foreign money been flowing? Into U.S. fixed income, particularly Treasuries and agency debt. In January, Chinese investors purchased $15 billion of agency debt, the largest net purchase since July 2013. The foreign flows into Treasuries have been mostly concentrated among foreign private investors, as foreign official holders of Treasuries have continued to see net selling over the past several months.

To some extent, the net decline in foreign holdings is also a result of U.S. residents reducing their exposure to foreign securities. U.S. residents have been heavy sellers of foreign securities over the past 12 months, particularly foreign fixed income. With concerns about the current economic cycle, it appears capital is flowing toward domestic sources and fixed income.

Credit Market Data

Mortgage Rates	Current	Week Ago	4 Weeks Ago	Year Ago
30-Yr Fixed	4.28%	4.31%	4.35%	4.45%
15-Yr Fixed	3.71%	3.76%	3.77%	3.91%
5/1 ARM	3.84%	3.84%	3.84%	3.68%
Bank Lending	**Current Assets (Billions)**	**1-Week Change (SAAR)**	**4-Week Change (SAAR)**	**Year-Ago Change**
Commercial & Industrial	$2,346.8	17.23%	3.76%	10.44%
Revolving Home Equity	$345.5	-8.61%	-7.98%	-7.68%
Residential Mortgages	$1,894.7	-5.31%	9.65%	3.04%
Commerical Real Estate	$2,204.6	2.21%	4.25%	4.45%
Consumer	$1,513.1	-1.69%	6.86%	5.16%

Mortgage Rates Data as of 03/22/19, Bank Lending Data as of 03/06/19

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

Topic of the Week

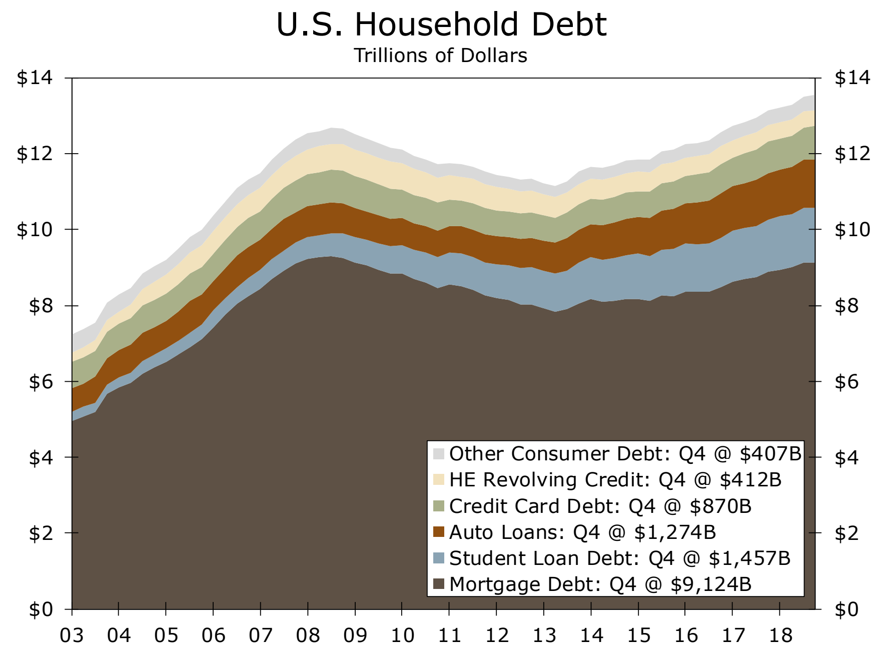
Shifting Burdens of Household Debt

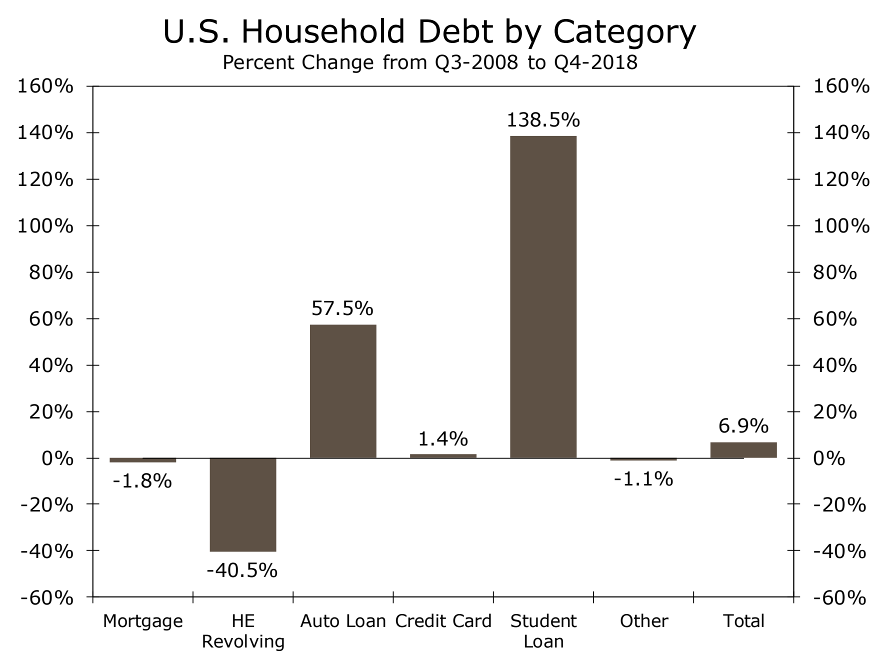
Household debt in the United States is higher now than it was at the height of the prior cycle, which has brought dire warnings about leverage and the inevitable comparisons to debt levels in 2008. There are reasons to be circumspect about the composition of household debt, and too much leverage was indeed a large part of what went wrong in the lead-up to the financial crisis, but the hand-wringing about reaching "all-time highs" in household debt are misplaced, in our view. As long as assets, income and the broader economy are rising along with it, rising debt itself is not disconcerting. It is when debt is growing in excess of these measures that it becomes a concern for future consumer spending and, more broadly, economic growth.

At $13.54 trillion in Q4-2018, total U.S. household debt is roughly 7% higher than the total level of household indebtedness at its prior peak in Q3-2008. Household debt amounted to about 86% of total disposable income in the fourth quarter, which is down from about 115% right before the 2008 crisis. The household Debt Service Ratio and Financial Obligations Ratio, remain at or near historic lows, suggesting households' quarterly debt payments remain relatively small. With manageable debt burdens, we do not expect debt payments to constrain consumer spending at this time.

What is potentially more troubling than the rise in household debt is the shifting composition of it. Almost all of the growth in household debt since 2008 is concentrated in student and auto loans. As you might expect, younger households tend to experience this in more pronounced ways. The youngest households owe more in student loans than they do on a mortgage. The growth in auto lending is not particularly disconcerting, but student loan debt is. Rather than seeing elevated household debt levels as an immediate catalyst for recession, what we see instead is a shift in the composition of debt toward student loans that will likely weigh on consumer spending for years to come.

For our full analysis please see, "Shifting Burdens of Household Debt".





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

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 3/22/2019	1 Week Ago	1 Year Ago
1-Month LIBOR	2.49	2.48	1.86
3-Month LIBOR	2.60	2.61	2.27
3-Month T-Bill	2.45	2.43	1.71
1-Year Treasury	2.45	2.48	2.04
2-Year Treasury	2.33	2.44	2.28
5-Year Treasury	2.25	2.40	2.62
10-Year Treasury	2.44	2.59	2.82
30-Year Treasury	2.88	3.01	3.06
Bond Buyer Index	3.92	4.04	3.90

Foreign Exchange Rates

	Friday 3/22/2019	1 Week Ago	1 Year Ago
Euro ($/€)	1.128	1.133	1.230
British Pound ($/£)	1.319	1.329	1.410
British Pound (£/€)	0.856	0.852	0.873
Japanese Yen (¥/$)	109.980	111.480	105.280
Canadian Dollar (C$/$)	1.341	1.334	1.294
Swiss Franc (CHF/$)	0.995	1.002	0.949
Australian Dollar (US$/A$)	0.710	0.709	0.769
Mexican Peso (MXN/$)	19.084	19.208	18.636
Chinese Yuan (CNY/$)	6.715	6.714	6.335
Indian Rupee (INR/$)	68.985	69.096	65.106
Brazilian Real (BRL/$)	3.888	3.814	3.315
U.S. Dollar Index	96.726	96.595	89.857

Foreign Interest Rates

	Friday 3/22/2019	1 Week Ago	1 Year Ago
3-Month Euro LIBOR	-0.34	-0.33	-0.39
3-Month Sterling LIBOR	0.84	0.84	0.64
3-Month Canada Banker's Acceptance	2.03	2.04	1.72
3-Month Yen LIBOR	-0.07	-0.08	-0.05
2-Year German	-0.56	-0.54	-0.60
2-Year U.K.	0.66	0.76	0.90
2-Year Canadian	1.55	1.62	1.82
2-Year Japanese	-0.17	-0.15	-0.16
10-Year German	-0.03	0.08	0.53
10-Year U.K.	1.02	1.21	1.44
10-Year Canadian	1.60	1.72	2.18
10-Year Japanese	-0.07	-0.03	0.04

Commodity Prices

	Friday 3/22/2019	1 Week Ago	1 Year Ago
WTI Crude ($/Barrel)	59.00	58.52	64.30
Brent Crude ($/Barrel)	66.87	67.16	68.91
Gold ($/Ounce)	1313.30	1302.48	1329.02
Hot-Rolled Steel ($/S.Ton)	697.00	700.00	825.00
Copper (¢/Pound)	285.00	290.35	301.20
Soybeans ($/Bushel)	8.66	8.54	9.95
Natural Gas ($/MMBTU)	2.78	2.80	2.62
Nickel ($/Metric Ton)	12,911	12,799	13,416
CRB Spot Inds.	492.62	490.26	524.51

Source: Bloomberg LP and Wells Fargo Securities

Next Week's Economic Calendar

	Monday	Tuesday	Wednesday	Thursday	Friday
	25	26	27	28	29
U.S. Data		**Housing Starts** January 1,230K February 1,201K (W) **Consumer Confidence Index** February 131.4 March 131.8 (W)	**Trade Balance** December -$54.8B January -$58.4B (W)	**GDP (QoQ, Annualized)** Q4 2.6% Q4 (Third Release) 2.4% (W) **Pending Home Sales (MoM)** January 4.6% February 0.5% (C)	**Personal Income (MoM)** January -0.1% February 0.4% (W)
Global Data	**Japan** **Industry Activity Index (MoM)** December -0.4% **New Zealand** **Trade Balance NZD** January -914M	**France** **GDP (QoQ)** Q4 0.3% **Sweden** **PPI (YoY)** January 5.6%		**Mexico** **Overnight Rate** Previous 8.25% **Argentina** **Economic Activity Index (YoY)** December -7.0%	**Eurozone** **CPI Estimate (YoY)** February 1.5% **United Kingdom** **GDP (QoQ)** Q4 0.2%

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

Source: Bloomberg LP and Wells Fargo Securities

Wells Fargo Securities Economics Group

Jay H. Bryson, Ph.D.	Global Economist	(704) 410-3274	jay.bryson@wellsfargo.com
Mark Vitner	Senior Economist	(704) 410-3277	mark.vitner@wellsfargo.com
Sam Bullard	Senior Economist	(704) 410-3280	sam.bullard@wellsfargo.com
Nick Bennenbroek	Macro Strategist	(212) 214-5636	nicholas.bennenbroek@wellsfargo.com
Tim Quinlan	Senior Economist	(704) 410-3283	tim.quinlan@wellsfargo.com
Azhar Iqbal	Econometrician	(212) 214-2029	azhar.iqbal@wellsfargo.com
Sarah House	Senior Economist	(704) 410-3282	sarah.house@wellsfargo.com
Charlie Dougherty	Economist	(704) 410-6542	charles.dougherty@wellsfargo.com
Erik Nelson	Macro Strategist	(212) 214-5652	erik.f.nelson@wellsfargo.com
Michael Pugliese	Economist	(212) 214-5058	michael.d.pugliese@wellsfargo.com
Brendan McKenna	Macro Strategist	(212) 214-5637	brendan.mckenna@wellsfargo.com
Shannon Seery	Economic Analyst	(704) 410-1681	shannon.seery@wellsfargo.com
Matthew Honnold	Economic Analyst	(704) 410-3059	matthew.honnold@wellsfargo.com
Dawne Howes	Administrative Assistant	(704) 410-3272	dawne.howes@wellsfargo.com

WELLS FARGO SECURITIES