

# Economics Group

## Special Commentary

Eugenio J. Alemán, Senior Economist  
[eugenio.j.aleman@wellsfargo.com](mailto:eugenio.j.aleman@wellsfargo.com) • (704) 410-3273  
 Shannon Seery, Economic Analyst  
[shannon.seery@wellsfargo.com](mailto:shannon.seery@wellsfargo.com) • (704) 410-1681

# Is the U.S. Consumer Running on Fumes?

## Executive Summary

Personal consumption expenditures growth continues to remain at elevated levels despite lackluster gains in real disposable personal income. Increased consumption yet muted income growth leads to an intriguing question: is the U.S. consumer running on fumes?

In this special report, we delve into the topic of consumption and what is currently supporting consumers' habits. We analyze the current trends between consumption and income, particularly focusing on the amount Americans are saving and how their confidence, relative to the performance of the economy, impacts their consumption. We disclose any alterations in borrowing, and discuss the sustainability of current consumer behavior in highlighting any potential threats to the pace of consumption. What we are most concerned with today is if the weakness in real disposable personal income is putting more pressure on alternative ways to fund increased consumption. How sustainable is it for consumers to draw from their accumulated wealth, rather than from growth in income, to fund their consumption habits?

*Is weakness in real disposable personal income putting more pressure on alternative ways to fund consumption?*

## Strong Real PCE Growth, Weak Real DPI Growth

Americans reacted to the Great Recession by increasing the saving rate and by deleveraging. The rate of saving, which was at a low of 1.9 percent in July 2005, increased to 8.1 percent by May 2009 as individuals retrenched during the Great Recession. Despite the savings rate reaching as high as 11.0 percent in December 2012, it has come down considerably and printed a rate of just 2.4 percent of disposable personal income (DPI) in December 2017 (Figure 1).<sup>1</sup> Now, markets are starting to get concerned that this reduction in the rate of saving is not sustainable, and that the risks for personal consumption expenditures (PCE) during 2018, and for the economy as a whole, have increased considerably.

Figure 1

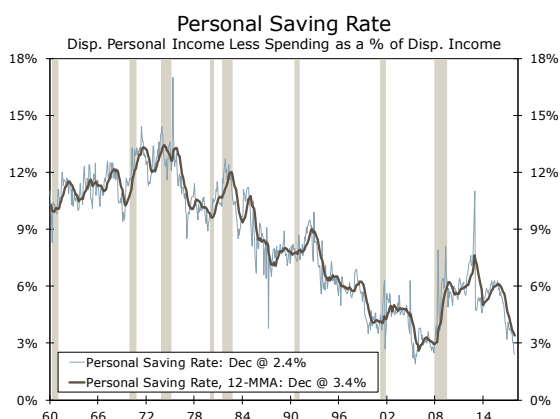
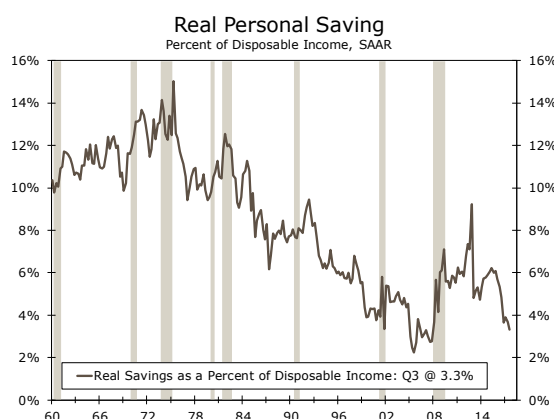


Figure 2



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

<sup>1</sup> Real disposable personal income surged 6.8 percent in December 2012 as firms paid bonuses in advance of a tax rate change that was scheduled to hit in January 2013. Thus, the increase in the rate of saving in December was a one-off effect.



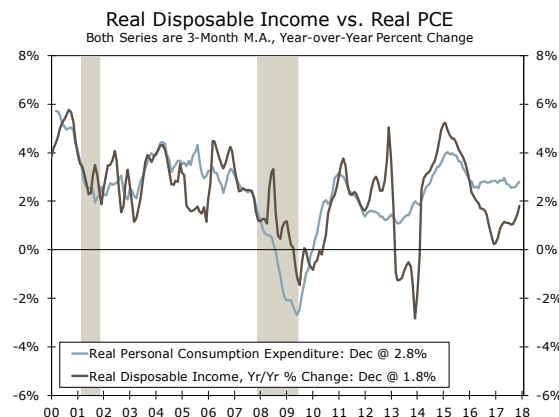
Some are even making comparisons to the pre-Great Recession years and are implying that we may reach a scenario such as the one we observed during the Great Recession. However, while there are some similarities with the pre-Great Recession period the differences are, in our view, more important for consumer behavior, as well as for the economy as a whole, than the similarities.

The question many are asking is: can the U.S. consumer continue to consume at the current pace or are we heading for a correction? Although this question seems to be straightforward, the answer is not as direct as it may appear.

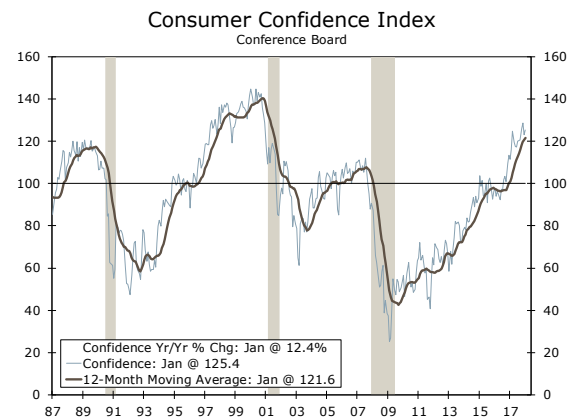
One of the keys to answering this question has to do with the difference in the rates of growth of real DPI and real PCE. It is clear that the growth rate of disposable income has not kept pace with the increase in consumption during the past several years. In December, real DPI grew 1.8 percent versus a year earlier, while real PCE did so by 2.8 percent (Figure 3), both series on a three-month moving average basis. The good news is that income growth has been strengthening lately. However, real DPI growth was up a mere 0.24 percent in December 2016, on a year-over-year three-month moving average basis.

That is, despite a lack of growth in DPI during the past several years, Americans have continued consuming by bringing down their rate of saving to help compensate the lack of growth in income. Could this become a problem? Yes, if it continues for a long period of time. As Figure 3 shows, any divergence in these series tends to disappear over time by a change in the growth rate of the series. We had this divergence occurring just before the Great Recession, between 2004 and 2006, and then it occurred again during 2013 and 2014. However, the 2013-2014 divergence was due to the change in the tax code (see footnote 1) that disappeared over time.

**Figure 3**



**Figure 4**



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

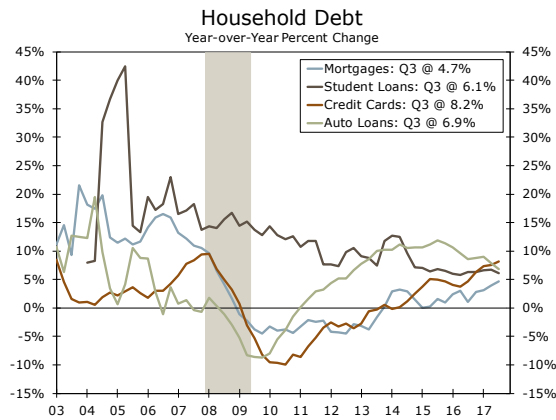
That is, this is not bad in and of itself. It is clear by looking at the consumer confidence index that Americans have become more confident regarding the future of the economy and of their own situation today compared to several years ago (Figure 4). This means that they feel confident to splurge, by bringing down the saving rate, today a little more than in previous economic cycles. It is also important to point out that consumer confidence during the inter-recession period (after the Dot-com bubble recession and before the Great Recession) was weak compared to the levels we are seeing today for the index. Furthermore, some of the deviation between the growth rate in real DPI and real PCE during the 2004-2006 period seems to have been filled by a reduction in the saving rate plus strong growth in student, mortgage and credit card loans (Figure 5).

Today's deviation between growth in real PCE and growth in real DPI seems to have also been filled by a lowering of the saving rate as well as growth in credit. However, household debt as a percentage of DPI (Figure 6), which includes mortgage, student, credit card and auto loans, stands at 84 percent compared to about 105 percent before the Great Recession. That is, the increase in household debt as a percentage of DPI has been minimal today compared to what it was during the 2003-2008 period. We expect household debt to have increased during the final quarter of 2017,

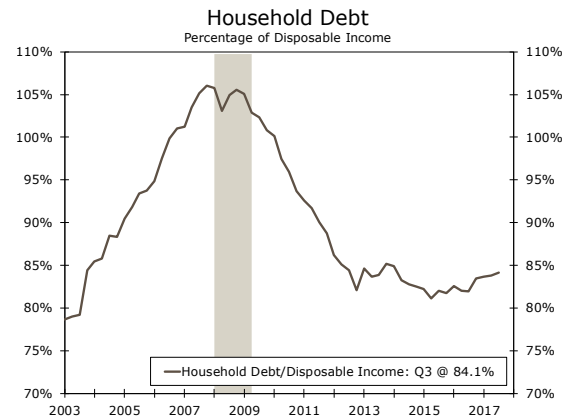
***Consumers appear to feel more confident to splurge today than in previous economic cycles.***

probably approaching close to 85 percent. However, for now there exists no similarities today on this important variable from what was happening before the Great Recession.

**Figure 5**



**Figure 6**

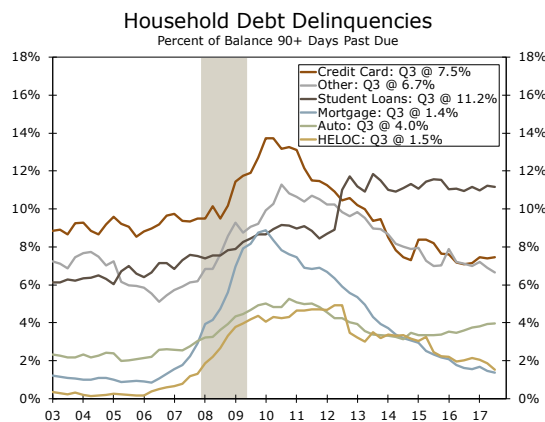


**Source: Federal Reserve Bank of New York, U.S. Department of Commerce and Wells Fargo Securities**

Today, the rate of growth of mortgage loans as well as credit card loans continue to strengthen, but those for automobile loans and student loans have been on a slowdown trend for several years. Similarly, evidence from household debt delinquencies still gives mixed results regarding household debt concerns. While student loan delinquency rates remain high (11.2 percent in Q3-2017), automobile loan delinquencies stand at 4.0 percent, and have been slowly trending up for the past several years. However, credit card delinquency rates have stabilized below 8 percent, which is lower than what they were before the Great Recession. Perhaps the biggest concern for this credit cycle is HELOC delinquency rates. Although trending lower for the past six years or so, the HELOC rates remain stubbornly high compared to those prevalent for this type of credit prior to the recession (Figure 7). This could be an area of risk for the credit market, the consumer, and for the economy as a whole going forward.

*Although some credit concerns exist today, the situation is very different than prior to the Great Recession.*

**Figure 7**



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

Thus, while we have some concerns regarding credit, the situation today is different than what was occurring before the Great Recession. What we are most concerned with today is that the weakness in real DPI growth is putting a little more pressure on alternative ways to fund increased consumption. At a time when consumers feel confident, they are not only lowering the amount they save, but they are consuming from accumulated wealth, rather than from income gains.

## Competing Forces in Changing Times: Income versus Wealth

There is a large literature base on the effects of wealth on consumption. One of these research reports has estimated that Americans spend about 6 cents of each additional dollar of housing wealth in higher consumption, while spending about 2 cents for each extra dollar of financial wealth in higher consumption.<sup>2</sup>

The pre-Great Recession period was a time that exhibited this wealth effect. The wealth effect can be broadly understood as the relationship between increased wealth leading to increased consumption. That is, as asset values rise, consumers feel more confident about their personal wealth, and this increased confidence causes them to feel comfortable in increasing their consumption by utilizing some of their accumulated wealth. During the pre-Great Recession period, as home prices increased, many Americans had the ability to refinance their homes. They were able to take a portion of the increase in their home value and utilize it for increased consumption. This equity extraction was called “mortgage equity withdrawal” or MEW. During those years some individuals argued that Americans were utilizing their homes as ATM machines to keep their pace of consumption. Today, we know how such a MEW experiment ended – with the worst recession since the Great Depression, with levels of negative equity that in some states reached 70 plus percent at the worst point of the recession and after home prices across the country collapsed.

So the question is, could this happen again? The straight-forward answer is – of course it can. However, the conditions of the U.S. economy, the credit market and the housing market are extremely different today than what they were during the boom of the early 2000 to mid-2000s. One of the biggest differences is that there are less sub-prime loans available compared to that period of time. Similarly, the regulatory environment that exists today has stricter guidelines than it did in the early 2000 to mid-2000 period. A third big difference is that a majority of individuals that could refinance their homes have already done so. That is, mortgage interest rates were so low over the past several years that there is little incentive to refinance homes today at higher interest rates. Therefore, there is little access to excess equity from the recent increase in home prices, and this is limiting the ability of Americans to use their homes as ATMs this time around.

However, financial wealth is different than housing wealth, especially for those Americans that own individual stocks that are not part of their 401(k)s. This type of wealth is highly liquid and can be used by their owners to make purchases. However, as we previously mentioned, the estimate of an increase in consumption from financial wealth is much lower than that coming from housing wealth. Furthermore, since financial wealth is not homogeneously distributed across income levels and is in the hands, in general, of high-income Americans, a change in financial wealth has a different effect over the economy as a whole than a change in housing wealth.<sup>3</sup>

## What Does This Mean for the Future Growth of PCE?

This is perhaps one of the biggest questions today, because housing wealth’s effect on consumption is difficult to come by, especially in today’s environment where there is little evidence that there is a process of MEW going on. It is true that as Americans feel more confident in the future economic conditions, and as they see their home values appreciate, they may feel more comfortable bringing the saving rate lower today and taking on more credit. However, there is little evidence that a repeat of the pre-Great Recession equity extraction and credit expansion are occurring today. That is, a more confident consumer is expected to consume more even if they need to sacrifice how much they are saving today. Furthermore, we do not see a correction occurring in the housing market as we saw during the Great Recession so this process may continue for a while.

If we continue to see the recent correction in the financial market then this will have a negative effect on real PCE growth, but this effect would not be as strong as if the correction happened to home prices or real DPI. Having said this, there is a big caveat to this conclusion. For those that are entering retirement and no longer count on housing wealth to finance real PCE, housing wealth will

<sup>2</sup> “Housing Wealth and Consumption,” Matteo Iacoviello, June 23, 2010, Federal Reserve Board

<sup>3</sup> “Wealth Chocks and Macroeconomic Dynamics,” August 2013 by Daniel Cooper, Federal Reserve Bank of Boston and Karen Dynan, Brookings Institution. See also “Housing Wealth and Consumption Expenditure,” by Christopher D. Carroll, January 30, 2004.

*With increased asset values, consumers gain confidence which may lead to increases in consumption.*

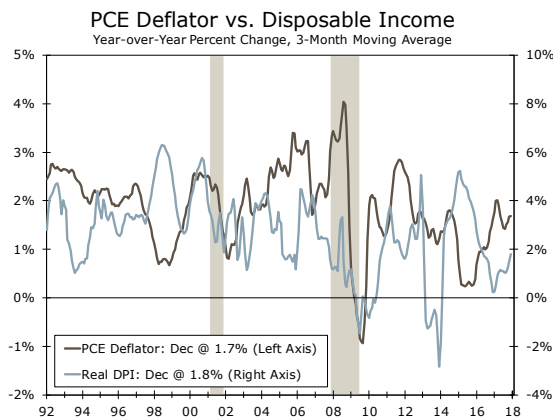
become less and less important, while financial wealth will become increasingly more important, as such wealth starts to generate income during retirement. Of course, as an individual approaches retirement, advisors tend to recommend a shift in investment strategy, meaning less reliance in the stock market, which aids in protecting retirement income from the ups and downs of the financial market.

That is, in theory, the importance of housing wealth and financial wealth should diminish for those that depend on retirement income. However, during retirement, social security as well as wealth become retirees' main sources of income, and thus the distinction between income and wealth disappears.

### The Threat of Higher Inflation and Higher Interest Rates

In general, higher inflation reduces the growth rate of real disposable personal income and vice versa, which is clearly demonstrated in Figure 8. As income and wealth are affected by fluctuations in inflation, one of the biggest threats over the next several years has to do with the rate of inflation. Markets recently seem to have been spooked by the relatively, and surprisingly, strong report on average hourly earnings, which could be indicating some pressure on prices for the U.S. economy. Higher inflation means higher interest rates, and both factors are clearly negative for the U.S. consumer. Higher inflation reduces the purchasing power of income, while higher interest rates makes purchases of durable goods, which are typically financed, more expensive over time. While for those that have fixed-rate mortgages, it is music to their ears, it is bad news for those that have adjustable rate mortgages.

Figure 8



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

Although inflation has remained low in this cycle compared to its historical trend, if prices were to accelerate, Americans' real DPI growth will, once again, slow down and could also lead to a slowing of growth in real PCE, all else equal. Therefore, if we were to see an uptick in inflation, real DPI growth will slow and consumers' purchasing power, or the amount they could consume based on their current income, would be negatively affected. Although this effect is clearly demonstrated in Figure 8, it is also evident that DPI experiences fluctuations with rather lackluster inflation growth. That is, although higher inflation can directly decrease disposable income growth, it is not the only factor that causes reductions in the rate of growth of income.

Furthermore, increases in interest rates could contribute to a slowdown in real PCE, as consumer purchases might diminish based on increased expense, such as what we have previously mentioned associated with durable goods financing. Another sector of risk for the consumer as well as for the credit market is the tax reform's change in second mortgages or equity lines of credit. Americans, in some circumstances, can no longer take a credit on their taxes for interest on equity lines of credit and this together with the still-high, relative to the past, delinquency rate for these lines of credit could be signaling problems ahead for the U.S. consumer, as well as for the overall credit market.

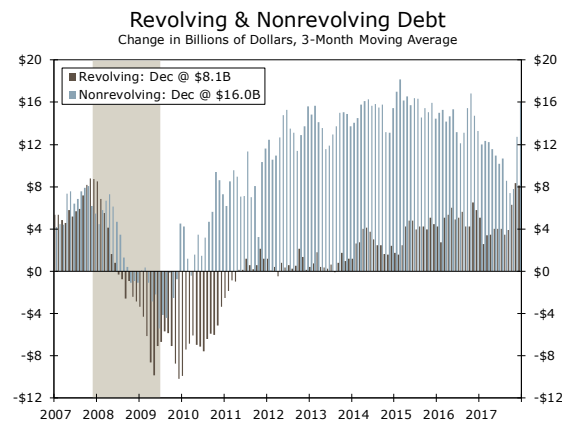
**Increased inflation presents a potential threat to the purchasing power of consumers.**

**American consumers remain bullish on the U.S. economy.**

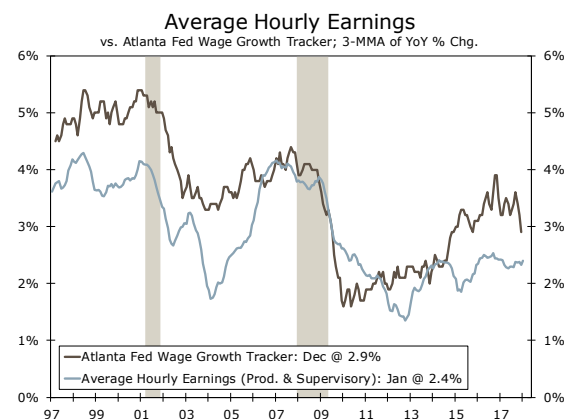
### Just in Time: Higher Credit, Earnings and Lower Taxes

It is clear that American consumers remain bullish on the U.S. economy, as we have seen by the performance of the consumer confidence index for more than a year, as well as the strong performance of real PCE during the past year. As we previously mentioned, although growth in real DPI has been weak but strengthening recently, Americans have compensated for the lack of real income growth with a lowering of the saving rate as well as by increasing credit, fundamentally increasing credit card borrowing (Figure 9). As we previously mentioned, although credit card borrowing has been rising lately, delinquency rates for credit cards are lower today than before the Great Recession period. Having said this, this is perhaps one of the sectors of credit which should be monitored over the next several quarters to see how it evolves, as credit card borrowing tends to be costly for consumers.

**Figure 9**



**Figure 10**



**Source: Federal Reserve Bank of Atlanta, Federal Reserve System and Wells Fargo Securities**

Perhaps the better news for the American consumer lately was the release of the employment and average hourly earnings numbers. For January, both figures were better than expectations with employment increasing 200,000 in January and average hourly earnings increasing 2.9 percent on a year-earlier basis (2.4 percent on a three-month moving average for production and supervisory workers; Figure 10). If sustained, both of these data points are bullish for income growth this year. Furthermore, the lowering of income tax rates will also start to make their rounds in the U.S. economy in the next couple of quarters, which will likely add ‘gasoline’ to American consumers’ tanks, which were close to running on fumes.

### Conclusion

Personal consumption expenditures growth has remained at elevated levels this past year, despite the lack of growth in real disposable income. It is evident that consumers have compensated for the lack of growth in their incomes by decreasing the amount they save to keep pace with their current consumption habits. Higher confidence in the current and future state of the economy has added fuel to the flames of the current expansion. This increased confidence, backed by the feeling of increased financial security, has fostered a condition where individuals are more confident to decrease the amount they save, or even utilize part of their accumulated wealth (housing as well as financial wealth) to help fund their consumption.

Although the current gap in growth between real DPI and real PCE is showing a consumer that could well be ‘running only on fumes,’ it is also clear that real DPI growth has been growing faster lately, which could help sustain growth in real PCE going forward. Furthermore, we do not see many similarities to the pre-Great Recession period, a period where consumer confidence was weak compared to today.

That is, current consumer conditions differ more than they relate to the pre-Great Recession era, even if the saving rate is close to the levels it reached before the Great Recession. Thus, we feel confident on the outlook of the consumer this year and into next. Furthermore, we are expecting

**We acknowledge several risks to our forecast; however, we expect conditions to continue to foster strong consumer demand.**

an increase in real DPI in 2018 based on continued tightening in the labor market coupled with only small increases in inflation. Similarly, we expect borrowing to continue at a healthy pace. These expected conditions should continue to foster strong consumer demand into 2019.

We acknowledge several risks to our forecast: higher inflation, higher interest rates, and potentially deteriorating credit market conditions. However, as of today, there are few, if any, similarities with what was happening with the U.S. consumer before the Great Recession.

## Wells Fargo Securities 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
Azhar Iqbal	Econometrician	(704) 410-3270	azhar.iqbal@wellsfargo.com
Tim Quinlan	Senior Economist	(704) 410-3283	tim.quinlan@wellsfargo.com
Eric Viloría, 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
Jamie Feik	Economist	(704) 410-3291	jamie.feik@wellsfargo.com
Erik Nelson	Currency Strategist	(212) 214-5652	erik.f.nelson@wellsfargo.com
Michael Pugliese	Economic Analyst	(704) 410-3156	michael.d.pugliese@wellsfargo.com
Harry Pershing	Economic Analyst	(704) 410-3034	harry.pershing@wellsfargo.com
Hank Carmichael	Economic Analyst	(704) 410-3059	john.h.carmichael@wellsfargo.com
Ariana Vaisey	Economic Analyst	(704) 410-1309	ariana.b.vaisey@wellsfargo.com
Abigail Kinnaman	Economic Analyst	(704) 410-1570	abigail.kinnaman@wellsfargo.com
Shannon Seery	Economic Analyst	(704) 410-1681	shannon.seery@wellsfargo.com
Donna LaFleur	Executive Assistant	(704) 410-3279	donna.lafleur@wellsfargo.com
Dawne Howes	Administrative Assistant	(704) 410-3272	dawne.howes@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 Clearing Services, LLC, Wells Fargo Securities International Limited, Wells Fargo Securities Asia Limited and Wells Fargo Securities (Japan) Co. Limited. Wells Fargo Securities, LLC. 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. is registered with the Commodities Futures Trading Commission as a swap dealer and is a member in good standing of the National Futures Association. Wells Fargo Securities, LLC. and Wells Fargo Bank, N.A. 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 © 2018 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