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Household Debt: Cause For Concern Or No Big Deal?

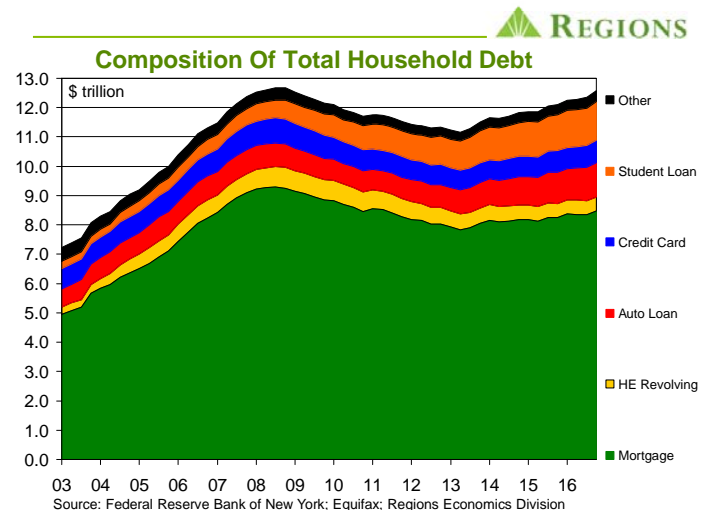
It is often said consumers are the engine that powers the U.S. economy and debt is the fuel on which that engine runs. We're not so sure we'd go that far, but one simply cannot deny there has been an increased reliance on debt on the part of U.S. consumers over the years. This is a topic we have discussed on many different occasions and in many different forums, and we have more than once been accused of being nags on this topic. Nevertheless, here we go again but, this time, no nagging, just some observations on some trends we think worth noting. Promise.

The Federal Reserve Bank of New York (New York Fed) recently released their *Quarterly Report on Household Debt and Credit* for Q4 2016. While not going back nearly as far as our go-to source for data on household debt, the Federal Reserve's quarterly *Flow of Funds* report, the New York Fed report has the virtue of providing greater detail beneath the headline numbers than the *Flow of Funds*. And, while the numbers cited in the two reports do not exactly match, the trends in the data are closely aligned. In what follows, we'll highlight some of what we see as the more relevant points from the latest New York Fed report and, in light of expected increases in market interest rates over the course of this year, we'll discuss some of the potential implications for the growth of household debt and, in turn, consumer spending.

Aggregate household debt balances rose sharply in Q4 2016 as reported by the New York Fed, leaving the level of outstanding debt at \$12.576 trillion, or, just 0.78 percent shy of the pre-recession peak. For 2016 as a whole, outstanding household debt balances rose by \$460 billion, the largest annual increase since 2007. That household debt is closing in on its pre-recession peak will no doubt conjure up bad memories and fresh concerns in some quarters. But, a look at the underlying details reveals several differences between now and then, some of which will provide comfort, others, well, not so much.

For starters, the composition and sources of growth of household debt are different this time around. Prior to the 2007-09 recession, mortgage-related debt, including purchase and refinance mortgage loans, home equity loans, and home equity lines of credit, was the primary driver of growth in total household debt. But, while mortgage loans, whether for purchase or refinancing, remain far and away the largest individual component of household debt, growth in total household debt in recent years has been mainly driven by student loans and auto loans. Between Q2 2013 (the cyclical trough of household debt) and Q4 2016, outstanding mortgage debt increased by 8.1 percent while balances on home equity lines of credit fell by 12.4 percent. In contrast, outstanding auto loan balances rose by 42.1 percent over this same period while outstanding student loan debt rose by 31.8

percent. It is also worth noting that while outstanding balances on other types of household debt declined during and after the 2007-09 recession, student loan debt continued to grow.

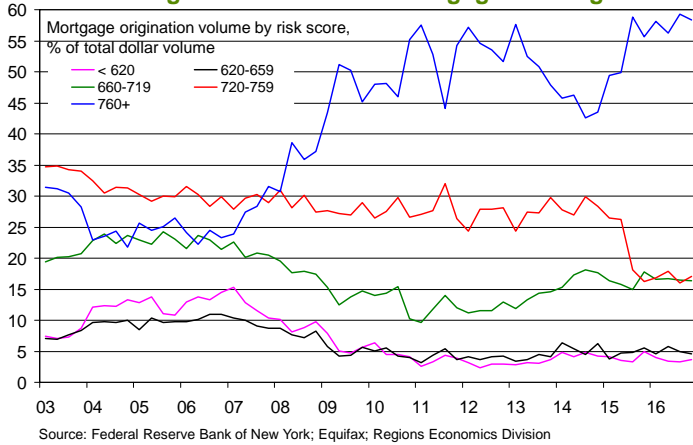


While the growth of student loan debt has eased a bit over the past few quarters, growth in auto loan debt has yet to show any signs of slowing. For 2016 as a whole, mortgage debt outstanding grew by 2.8 percent, home equity line balances contracted by 2.9 percent, credit card debt grew by 6.3 percent, student loan debt grew by 6.3 percent, auto loan debt grew by 8.7 percent, and all other forms of consumer debt combined grew by 7.4 percent. As of Q4 2016, mortgage debt accounted for 67.4 percent of all outstanding household debt, down from the cyclical peak of 73.7 percent, while student loan debt accounted for 10.4 percent and auto loan debt accounted for 9.2 percent, both topping the 6.2 percent share of credit card debt. In Q1 2003, the first quarter of the New York Fed's data set, student loan debt accounted for just 3.3 percent of total household debt.

In addition to changes in the sources of growth in household debt in the post-recession years, there have also been significant changes in the (credit) quality of that debt. For instance, from 2009 through 2016, 52.0 percent of the dollar volume of mortgage loan originations (again, this includes purchase and refinancing loans) was accounted for by borrowers with credit scores of 760 or higher; in 2016 that share was over 58 percent. Borrowers with credit scores between 720 and 759 accounted for 25.3 percent of all mortgage originations between 2009 and 2016. Interestingly enough, the jump in origination volumes in the 760 and higher credit score bucket in 2016 came at the expense of the 720-to-759 bucket, as this latter group accounted for just 16.9 percent of all originations in 2016. Borrowers with credit scores below 720 accounted for roughly one-quarter of all mortgage originations in 2016, a share that has not changed much since 2009.



Taking Fewer Risks With Mortgage Lending ...

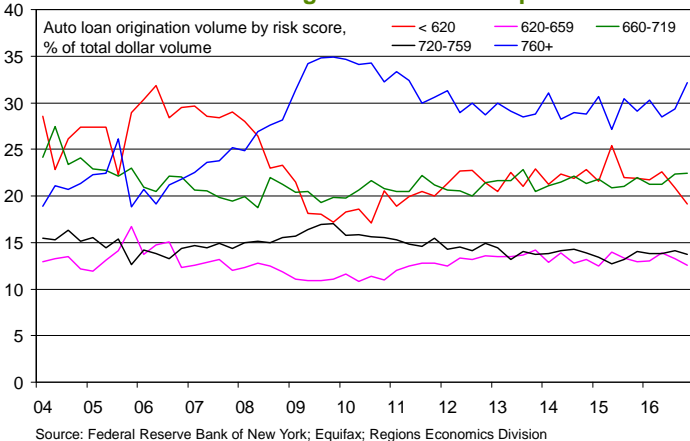


These patterns are consistent with some of the broader trends in the housing market we and other analysts have been pointing to over the past few years. For starters, mortgage lending standards have been significantly more stringent in the post-recession years than was the case in the years leading up to the recession. While standards have eased a bit over recent quarters, this seems to have benefitted those in the middle range of credit scores, i.e., those with scores between 660 and 719 who have accounted for a higher share of mortgage originations while the share accounted for by those with scores below 660 has been fairly steady.

The heavy concentration of mortgage originations amongst those in the top credit bucket goes hand-in-hand with another trend in the housing market in recent years, i.e., home sales skewed toward the higher price ranges, particularly new home sales. Builders faced with shortages of lots and labor, on top of a more cumbersome and costly entitlement process, have focused production at the higher price points, catering to buyers able to procure mortgage financing and who can more readily absorb the higher costs. Or, as we have put it, builders have made up for in margin what they've missed out on in volume.



Auto Loan Originations More Dispersed



Though not nearly as pronounced, there has been a similar shift in auto loan originations in the post-recession years. Those with credit scores of 760 or higher have accounted for 30.4 percent of all auto loan originations since 2009, up from the pre-recession years but not nearly as dominant a share as with mortgage loans. It is also interesting to note that those with credit scores of less than 620 have accounted for just under 21 percent of all auto loan originations since 2009, which is actually below their share in the pre-recession years. While “sub-prime” auto loans have garnered a considerable amount of media attention, the actual data suggest any problem is not as pronounced as those media accounts imply.

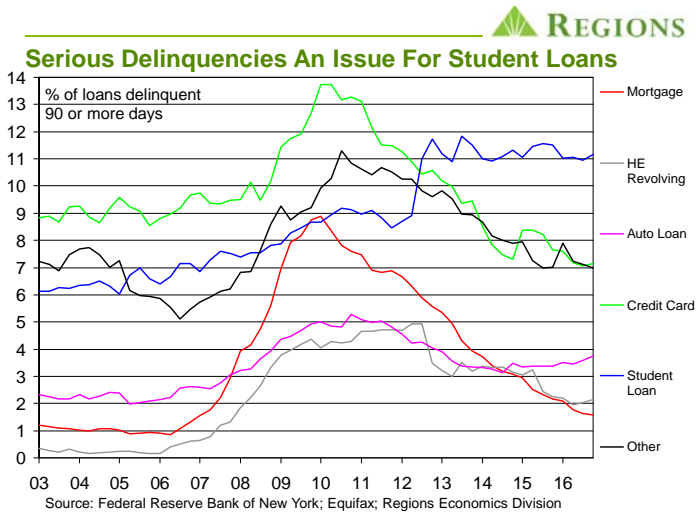
This is not to dismiss any concerns about sub-prime auto lending out of hand. For instance, with motor vehicle sales heavily skewed toward higher priced SUV’s/light trucks, lenders have extended loan terms longer and longer in order for some borrowers to be able to meet monthly payment requirements, which can raise its own set of problems should the vehicle not last as long as the loan. More broadly, the changing composition of drivers of growth in household debt and the shifting composition of borrowers across credit buckets raises a different set of potential problems than was the case with the run-up in household debt in the pre-recession years. For instance, should the economy slip into recession, the higher underwriting standards on mortgage loans significantly lessen the likelihood lenders will once again find themselves writing off significant chunks of mortgage loans and accumulating sizeable inventories of REO properties.

In contrast, however, the sustained rapid growth in student loan debt over the past several years could potentially have lasting impacts on those younger householders who have taken on significant levels of such debt. Doing so impedes their ability to acquire other forms of credit, such as mortgage financing, and monthly payment obligations leave them with less capacity to engage in various forms of discretionary spending. Were the economy to slip into recession and greater numbers of those with student loan debt become unable meet their payment obligations, that the federal government has largely taken over this market means all taxpayers will, to some degree, be on the hook.

Even with the economy not slipping into recession, rising student loan delinquencies have become an issue. As of Q4 2016, 11.2 percent of all student loan debt (measured by the dollar volume of loan balances) was delinquent at least 90 days, easily the highest rate of seriously delinquent balances of any form of consumer debt. Moreover, this serious delinquency rate has steadily trended higher over the life of the New York Fed’s report while serious delinquency rates on all other forms of consumer debt have receded from their cyclical peaks.

As would be expected given the shifting composition of borrowers, the serious delinquency rate on mortgage loans continues to decline. As of Q4 2016, 1.6 percent of mortgage loan balances were at least 90 days delinquent, still above pre-recession norms but well below the cyclical peak of 8.89 percent hit in Q1 2010. The serious delinquency rate on credit card loans ended 2016 well below not only the cyclical peak of almost 14 percent but also below the pre-recession average of about nine percent. We will note that delinquency rates tend to exhibit clear seasonal patterns and, as such, the upturns in delinquency rates in Q4 2016 for some

loan types do not necessarily mark the beginning of sustained upturns, though this bears watching over coming quarters.



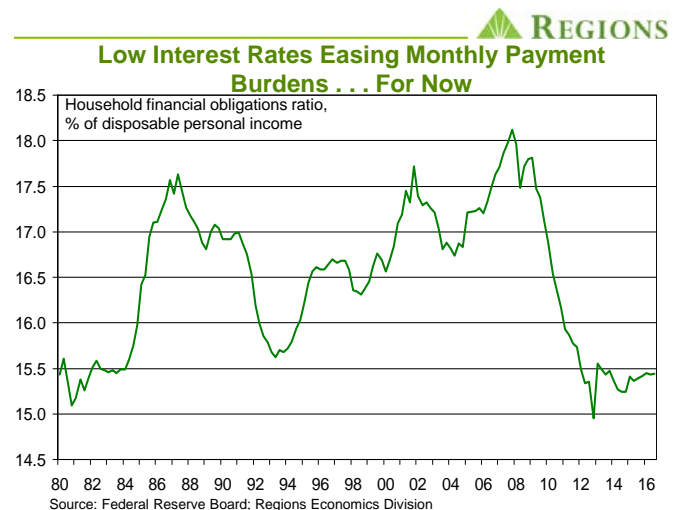
Another trend in the data worth noting is accelerating growth of credit card debt. With the exception of Q4 2013, credit card debt outstanding declined on a year-over-year basis in each quarter between Q2 2009 and Q1 2014. From Q2 2014 on, growth in credit card debt has picked up; the 6.3 percent year-on-year increase in Q4 2016 is the fastest such growth since Q2 2008. Different analysts will interpret this in different ways. Some see this faster growth as a sign of mounting financial distress, i.e., cash-strapped consumers having to resort to credit to finance consumption. Others point to it as a sign of rising confidence over prospects for income growth leading consumers to take on more debt. We lean more towards the latter explanation.

Keep in mind that growth in the level of outstanding household debt reflects existing borrowers utilizing debt more intensively as well as new borrowers being granted credit. In the case of credit card debt, the utilization rate (balances as a percentage of available credit limits) has hovered at around 23 percent over the past few years. The aggregate dollar volume of credit card limits has risen but the flat utilization rate does not point to distressed consumers. Obviously there are exceptions to any general rule; on the whole, though, it appears a greater number of consumers are taking on credit card debt, but to a degree well short of their capacity to do so.

So, you can either interpret this as consumers being increasingly desperate but not as desperate as they're going to become, or as consumers remaining somewhat disciplined even if they have become more willing to utilize credit card debt. One thing we have not seen to a large degree, at least not yet, in the current cycle is consumers using mortgage debt, particularly home equity loans or lines, as a substitute for credit card debt. It could be that consumers do not feel they have sufficient equity or simply have not gotten past the memories of how this worked out last time around. Either way, the data from the New York Fed report show utilization rates on home equity lines of credit have yet to exhibit any kind of meaningful and sustained increase. This is another metric that will bear watching given the rapid rates of house price appreciation seen in many markets over the past several quarters and reported increases in consumer confidence of late.

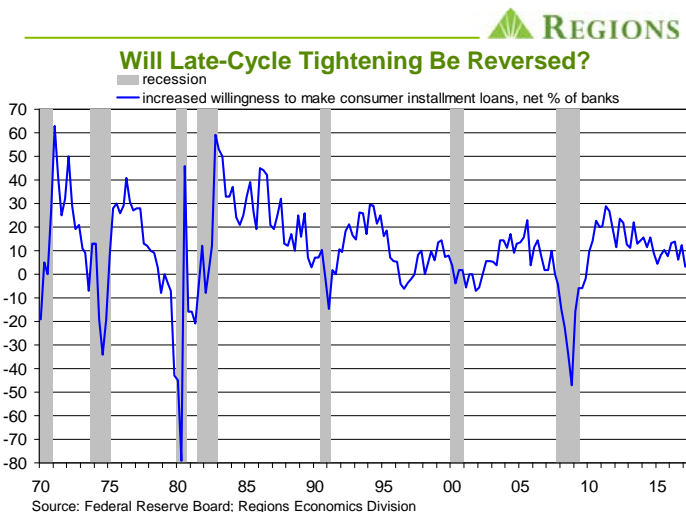
One factor that will impact the extent to which household debt, of all forms, grows over coming quarters will be the behavior of market interest rates. Over the past several years artificially low interest rates have helped to greatly ease the monthly debt service burdens (i.e., interest and principal payments) of households. This has helped mask the fact that the ratio of household debt to disposable household income remains over 100 percent. To be sure, the debt-to-income ratio is down from the peak of 133 percent hit in Q4 2007, but it nonetheless remains significantly higher than historical norms, even accounting for a steady upward drift in the ratio prior to the pre-recession explosion in debt.

Admittedly, we've been wrong on this point, at least so far, having argued that household deleveraging had further to go and that the debt-to-income ratio should, and would, fall further. The issue basically boils down to which matters more, the level of debt or the ability to service the debt. As seen in the chart below, thanks to low interest rates, the household financial obligations ratio (which encompasses a broader range of household financial payment obligations than the simple debt service ratio) has hovered near the lowest levels on record. To be sure, longer terms on auto loans have also helped lower monthly payment obligations, but interest rates and income growth are far and away the biggest drivers. Even as income growth has decelerated over recent quarters, monthly payment burdens have barely budged.



There is every reason, however, to think this will change over coming quarters if market interest rates indeed trend higher, as is widely expected to be the case. Some dismiss concerns over rising interest rates by noting, you know, for anyone flummoxed by the term "fixed rate debt," that the cost of servicing fixed rate debt won't increase along with market interest rates. There is, however, plenty of variable rate debt, particularly home equity lines and credit card debt, that will cost more to service as market interest rates rise. Aside from this issue, what is often overlooked is the impact of higher interest rates on the willingness and/or ability of consumers to take on new debt. For instance, as noted above the rate of house price appreciation has accelerated in many markets in recent quarters, but notably low mortgage interest rates have served as a buffer between price appreciation and affordability. To the extent mortgage interest rise further, that buffer will be thinner

and thinner. Given the distribution of mortgage loans across credit buckets discussed above, it may be tempting to argue this is less of a concern, but there is still a nontrivial share of mortgage loan originations going to borrowers who will not be as easily able to absorb higher mortgage interest rates. A similar argument can be made with auto loans, as there is only so long terms can be stretched to make servicing these loans possible. As such, we're not willing to casually dismiss concerns over rising interest rates.



As seen in the chart above, it would appear lenders already harbor concerns about the capacity of consumers to manage more debt, even before higher rates become a more pressing concern. Each quarter the Federal Reserve publishes its *Senior Loan Officer Opinion Survey*, an excellent quarterly summary of trends in commercial bank lending standards and underlying demand for loans for consumer, commercial, and commercial real estate loans. The Q1 2017 report shows banks, on balance, less willing to make consumer installment loans. Moreover, the past five years have seen a steady decline in banks' willingness to extend non-mortgage consumer credit. To be sure, past cycles have seen a similar pattern, i.e., a marked increase in willingness to make consumer loans in the early phases of economic recoveries followed by a steady tapering off in banks' willingness to lend.

Still, lending standards on many types of consumer loans tightened in the latest quarter. The tightening in standards for credit card loans is the first such tightening since 2010, while standards for auto loans were tightened by the greatest extent since 2011. The above chart showing a steady decline in banks' willingness to make consumer loans is, in a sense, a complement to our earlier chart showing mortgage loan originations highly concentrated in the higher credit score buckets. While delinquency rates on consumer debt, save for student loan debt, remain fairly low, lenders are of course more focused on future loan performance, so it is somewhat telling that the Fed's survey of bank loan officers is already indicating less borrower-friendly lending standards.

Obviously nonbank lenders can fill some, if not all, of the void left by banks pulling in the reins, but it nonetheless should tell us something that banks find grounds to become more cautious when expectations are almost uniform that the current expansion still has a way to run. And, it could be that, should the underlying pace of economic growth pick up, banks will find grounds to begin

easing lending standards, as we saw in the prolonged expansion of the 1990s.

Either way, we think there are valid reasons to question both the capacity and the willingness of households to continue to accumulate debt, particularly to the extent market interest rates trend higher over coming quarters. This, in turn, raises questions as to what we can expect in the way of growth in consumer spending. Thus far, auto loans are the main channel through which growth in household debt has directly fed into consumer spending. Recent quarters have seen somewhat of an increased role for credit card debt, but consumers have on the whole been fairly disciplined in this area. There is capacity for homeowners to increase the intensity of home equity debt, particularly given the stepped-up pace of house price appreciation that has given many homeowners larger equity cushions.

But, while tighter lending standards could lead to slower growth in auto loans, for credit card and mortgage loans the rising cost of such debt may become a constraint on growth in the quarters ahead. Still, tighter labor market conditions will support faster growth in personal income, and the possibility of tax cuts means we could see even more acceleration in the growth of disposable personal income. To the extent disposable income grows at a faster rate, that lessens the extent to which consumers will need to resort to debt to facilitate consumption spending.

That said, we remain concerned about the overall level of household debt; just because it hasn't been an issue yet doesn't mean that it won't become an issue at some point down the road. We think many analysts are too sanguine about the level of household debt and are too easily discounting the impact of higher interest rates. It is looking increasingly likely, however, that over the next several quarters we'll find out whether our concerns are, and have been all along, without merit. We don't often hope to be proven wrong but, in this case, we hope we're wrong.

FOMC Moving At A Faster Pace?

While we're on the topic of higher interest rates, we'd be remiss to not at least briefly discuss a FOMC that, as if out of nowhere, suddenly seems more hawkish. The week of February 27th saw a parade of FOMC officials, with the notable exception of St. Louis Fed President Bullard, strike a hawkish tone in their public comments. The week was capped off with a speech by Fed Chairwoman Yellen in which she stated a hike in the Fed funds rate at the March FOMC meeting would "likely be appropriate" should the data on employment and inflation continue to evolve in line with the Committee's expectations. At the time of her speech, the only piece of data standing between the FOMC and a March funds rate hike was the February employment report, and that report did nothing to dispel the notion the FOMC will move at this month's meeting (March 14-15). Indeed, market-implied probabilities of a March rate hike soared after the week of more hawkish talk from FOMC members.

Still, there was some confusion as to why Committee members took a more aggressive tone. After all, the minutes to the late-January FOMC meeting betrayed no sense of urgency over inflation, the most recent *Beige Book* did not point to a broad based and significant build in wage or price inflation, and Q1 real

GDP growth is tracking at below 2.0 percent. It could be that, like many market participants, the FOMC is discounting soft current quarter growth in anticipation of faster growth and/or inflation down the road thanks to looming changes in fiscal, regulatory, and trade policy.

Our sense is that the FOMC is, in essence, buying an option against such an outcome by upping the mid-point of the Fed funds target range by 25-basis points at this month's meeting, as we fully expect them to do. A hike this month simply keeps the FOMC on track for the three rate hikes this year implied by the December 2016 "dot plot" without locking them into such a course. Instead, moving in March gives the FOMC more latitude to assess how economic growth and inflation evolve over the course of this year and react accordingly. Thus far, market participants seem to have taken the FOMC's more hawkish talk in stride, and a March rate hike is unlikely to trigger a sharp sell-off in risk assets.

If nothing else, a March funds rate hike should help instill confidence that the FOMC is not in danger of falling behind the curve on inflation should the rate of economic growth indeed accelerate later in 2017. Still, while comments by FOMC members reveal no worries that they are behind the curve on inflation, that does not necessarily mean they don't worry about being behind. Behind in the pace at which they are removing what remains a high degree of monetary accommodation, that is.

which by historical standards is exceptionally low. But, as seen in the preceding chart, at present the actual value of the real Fed funds rate is right at negative 1.0 percent. Go ahead, let that sink in for a minute.

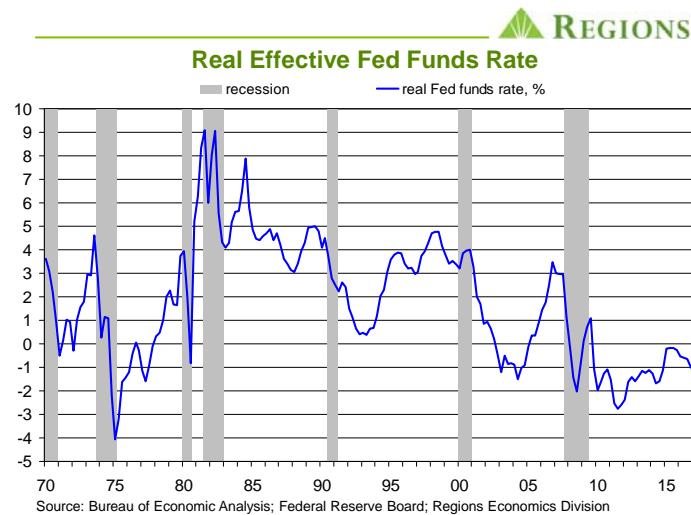
What this means is that, assuming the FOMC moves in 25-basis point increments, moving this month still leaves them nine hikes away from a neutral policy stance. In other words, despite the FOMC's contention they have largely fulfilled their dual mandate (an assessment with which we do not agree), monetary policy remains not just accommodative, but highly accommodative. It is in this context we made our earlier comment that the FOMC may be worried they are behind. The reality is that even if they deliver the three rate hikes this year that were implied by the last dot plot, that still would leave the real Fed funds rate in negative territory and mean that monetary policy remains highly accommodative.

This would put the FOMC in an even more uncomfortable spot if we do indeed get expansionary fiscal policy and a meaningful rolling back of the overall regulatory burden which, for the past several years, has acted as a drag on growth. This, in turn, could mean the FOMC moves at a faster pace than implied by the December 2016 dot plot. Keep in mind that the March FOMC meeting will be accompanied by a fresh batch of FOMC economic projections and an updated dot plot. It is possible the new dot plot could imply a faster pace of rate hikes, but we do not see this as a very likely outcome this month, particularly in the absence of specific details of changes in fiscal, regulatory, and trace policy.

In her March 3rd speech, Dr. Yellen of course offered no specifics, instead simply noting that should the economy evolve as the FOMC expects, "the process of scaling back accommodation will likely not be as slow as it was in 2015 and 2016." This isn't an exceptionally high bar to clear; after all, a sufficiently motivated terrestrial pulmonate gastropod mollusk could move at a faster pace than that at which the FOMC has moved thus far. Still, while market participants would not be rattled by three rate hikes this year and the economy could likely absorb such a gradual course of rate hikes, the question is whether the FOMC will be forced to move at an even faster pace.

As our prior discussion of household debt suggested, a faster pace of rate hikes than is now anticipated could have an adverse impact on the household sector of the economy, although it would likely not be readily apparent until 2018, and other sectors of the economy, such as U.S. exports of goods, would also likely suffer. Moreover, the costs of servicing government debt would increase to an even greater extent at a time when federal government budget deficits will likely be getting larger, not smaller.

Clearly, the FOMC would have to respond to faster economic growth and/or inflation brought about by changes to fiscal, regulatory, and trade policy. By doing so, however, the FOMC could be sowing the seeds of the expansion's ultimate demise. This would mean that an expansion which, for the most part, has been like no other we have seen before would end as many of those prior expansions have. This is not to say such an outcome is imminent or even unavoidable, but the faster the FOMC is forced to move, the more likely such an outcome becomes.



We were particularly taken by one part of Dr. Yellen's March 3rd speech, where she discussed the level of the "neutral" real Fed funds rate. In this context, "neutral" refers to a real (or, inflation adjusted) funds rate that is neither expansionary nor contractionary and, as such, fosters neither inflationary nor deflationary pressures. The above chart shows the path of the real Fed funds rate over the past several decades. As for the neutral level of the real funds rate, that is not a specific value set in stone but instead is determined by the underlying determinants of an economy's capacity for growth, factors such as the rate of labor force growth and the rate of productivity growth. Given how weak both of these factors are at present, the economy's speed limit and, in turn, the neutral real Fed funds rate, are notably low.

Indeed, as Dr. Yellen noted, most FOMC members put the longer-run value of the neutral real Fed funds rate at around 1.0 percent,

ECONOMIC OUTLOOK



March 2017

Q3 '16 (a)	Q4 '16 (p)	Q1 '17 (f)	Q2 '17 (f)	Q3 '17 (f)	Q4 '17 (f)	Q1 '18 (f)	Q2 '18 (f)		2015 (a)	2016 (p)	2017 (f)	2018 (f)
3.5	1.9	1.6	2.9	2.5	2.5	2.2	1.9	Real GDP ¹	2.6	1.6	2.3	2.2
3.0	3.0	1.4	2.5	2.6	2.7	2.4	2.2	Real Personal Consumption ¹	3.2	2.7	2.5	2.4
								Business Fixed Investment:				
-1.4	2.9	3.6	3.8	3.3	3.9	3.7	3.3	Equipment, Software, & IP ¹	4.0	0.1	2.7	3.4
12.0	-4.4	2.8	6.6	2.7	3.4	3.2	2.2	Structures ¹	-4.4	-3.0	2.9	2.9
-4.1	9.6	7.0	9.2	5.6	6.6	5.8	4.7	Residential Fixed Investment ¹	11.7	4.9	5.2	5.8
0.8	0.3	0.7	1.0	0.6	0.9	0.8	0.9	Government Expenditures ¹	1.8	0.8	0.6	0.9
-522.3	-599.6	-602.5	-594.1	-595.7	-603.1	-615.9	-628.9	Net Exports ²	-540.0	-561.6	-598.8	-636.0
1.145	1.249	1.203	1.223	1.238	1.260	1.279	1.295	Housing Starts, millions of units ³	1.108	1.176	1.231	1.308
17.5	18.0	17.6	17.2	17.1	17.2	17.1	16.8	Vehicle Sales, millions of units ³	17.4	17.5	17.3	16.8
4.9	4.7	4.7	4.6	4.5	4.5	4.4	4.4	Unemployment Rate, % ⁴	5.3	4.9	4.6	4.4
1.8	1.6	1.6	1.6	1.4	1.4	1.3	1.3	Non-Farm Employment ⁵	2.1	1.8	1.5	1.2
1.3	1.5	2.0	1.9	2.0	1.9	1.9	1.9	GDP Price Index ⁵	1.1	1.3	2.0	2.0
1.0	1.4	2.0	2.0	2.1	2.1	1.9	1.9	PCE Deflator ⁵	0.3	1.1	2.1	2.0
1.1	1.8	2.6	2.7	2.9	2.7	2.3	2.2	Consumer Price Index ⁵	0.1	1.3	2.7	2.2
1.7	1.7	1.8	1.9	2.0	2.2	2.2	2.1	Core PCE Deflator ⁵	1.4	1.7	2.0	2.1
2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.3	Core Consumer Price Index ⁵	1.8	2.2	2.3	2.3
0.38	0.42	0.67	0.92	1.13	1.18	1.42	1.67	Fed Funds Target Rate, % ⁴	0.14	0.39	0.97	1.72
1.56	2.13	2.49	2.64	2.72	2.78	2.86	2.92	10-Year Treasury Note Yield, % ⁴	2.14	1.84	2.66	2.96
3.45	3.84	4.17	4.38	4.49	4.55	4.63	4.69	30-Year Fixed Mortgage, % ⁴	3.85	3.65	4.40	4.72
-2.4	-2.7	-2.9	-3.0	-3.1	-3.0	-3.2	-3.4	Current Account, % of GDP	-2.6	-2.7	-3.1	-3.4

a = actual; f = forecast; p = preliminary

- Notes:
- 1 - annualized percentage change
 - 2 - chained 2009 \$ billions
 - 3 - annualized rate
 - 4 - quarterly average
 - 5 - year-over-year percentage change