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The Curious (Or Not) Case Of The Untapped Housing Equity

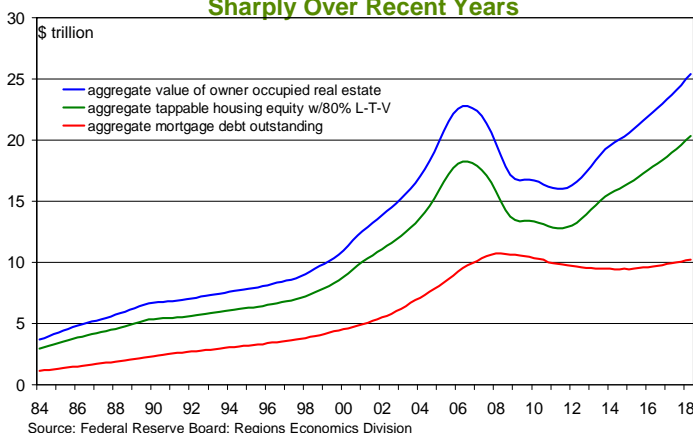
We love a good mystery as much as anyone, but if there is one thing any mystery lover knows, it is that some mysteries are less mysterious than others. For instance, over the past several weeks you've likely seen this headline or one (or more) very similar: "U.S. Homeowners Sitting On Trillions Of Untapped Housing Equity." What has motivated such headlines is the most recent estimate from *Black Knight*, a provider of mortgage data and analytics, which puts the aggregate value of untapped housing equity at roughly \$6 trillion. While steadily rising housing equity over the past several quarters isn't much of a mystery, many seem to find it very mysterious that U.S. consumers would let a single dollar of potential spending go untouched, let alone leaving over \$6 trillion of potential spending on the table.

For us, this is less of a mystery and more of an (or, yet another) illustration of how reacting to a headline number without understanding the underlying details can lead to some faulty conclusions. We will, however, admit to being mystified at how common this is, though at this point perhaps the bigger mystery is why we still find such behavior mystifying. In any event, there are a number of reasons why we think the story behind untapped housing equity is not as big as the headline numbers imply.

The red line shows the aggregate value of outstanding mortgage debt. One way to interpret the chart is that the green line shows the maximum amount of mortgage borrowing, of all forms, by owners of residential real estate that can be supported by the aggregate value of owner occupied real estate in any given period, the red line shows the amount of actual borrowing, so the difference between the green line and the red line in any given period represents "tappable" housing equity, or, the amount of borrowing at the disposal of owners of residential real estate.

Note that the amount of untapped equity implied by the Flow of Funds data – just over \$10 trillion as of Q2 2018 – is much larger than the *Black Knight* estimate. While the "truth" falls somewhere between the two, we think our estimate based on the Flow of Funds data is closer to the mark, even if a bit too high. The value of owner occupied real estate reported in the Flow of Funds data includes vacant land and mobile homes. But, since the components are not broken out, we have to work with the aggregate figure which, again, we think is a bit overstated in terms of untapped equity. Conversely, the *Black Knight* estimate is based on loan level data from a sample covering a wide swath of outstanding mortgage loans. This estimate, however, is far too low, as it does not account for those owner occupied housing units on which there is no mortgage debt. Based on data from the 2017 *American Community Survey*, 37.2 percent of owner occupied housing units have no mortgage debt attached to them. As such, any estimate based solely on the universe of mortgaged housing units significantly understates the level of untapped housing equity.

However Measured, Untapped Housing Equity Has Risen Sharply Over Recent Years

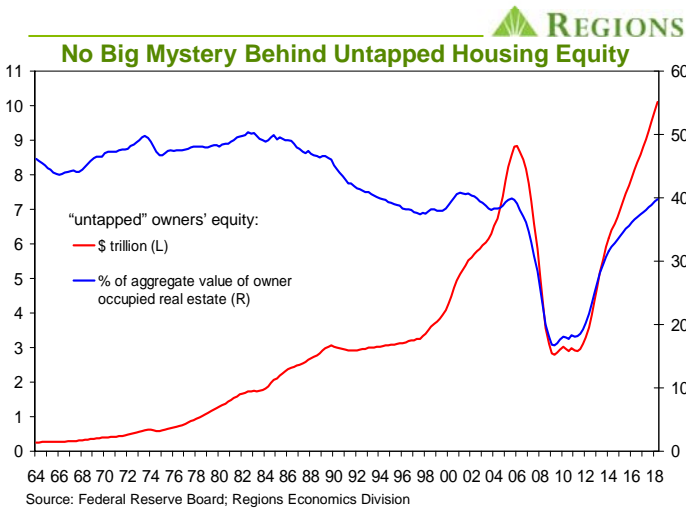


The chart above, using data from the Federal Reserve's quarterly "Financial Accounts of the U.S." (or, as it is more commonly known, the "Flow of Funds") report, helps frame our discussion. The blue line shows the aggregate value of owner occupied real estate in the U.S. The green line shows the potential amount, in the aggregate, that can be borrowed against the value of owner occupied real estate assuming a maximum loan-to-value ratio of 80 percent (consistent with the *Black Knight* methodology).

But, to us the main point is not whether \$6 trillion or \$10 trillion is the "right" number, but instead that the amount of untapped housing equity has grown rapidly over recent years. From the preceding chart one can see that the aggregate value of owner occupied real estate has grown rapidly and is easily above the prior cyclical peak while the aggregate level of outstanding mortgage debt is still below the prior cyclical peak. No matter how you measure it, there has been a sizeable increase in housing equity available to consumers, even if they seem unwilling to use it.

That said, it is often the case that numbers which seem large when standing alone don't seem nearly as large when put into proper context, and that is the case with untapped housing equity. For instance, the following chart scales the aggregate level of untapped housing equity to the aggregate value of owner occupied real estate. As seen in the chart, while the level of untapped housing equity is at a record high, untapped housing equity as a percentage of the value of owner occupied real estate is not, nor is it all that close. The following chart is based on our calculations using the Flow of Funds data, but there is no reason to think that the patterns shown in the chart would differ had the *Black Knight* data (which we do not have access to) been used. Regardless of whether one goes with \$10 trillion or \$6 trillion, either is still a large, perhaps inconceivably large, number reported in isolation,

but when put in context neither number seems nearly as large. As a side note, recall that it wasn't until the 1986 tax bill, which basically gave preferential tax treatment to residential mortgage debt, that borrowing against home equity took off. This, combined with significantly faster house price appreciation over the 1985-89 period, helps account for the downward drift in untapped equity as a percentage of the aggregate value of owner occupied real estate that began in the late-1980s, as seen below.



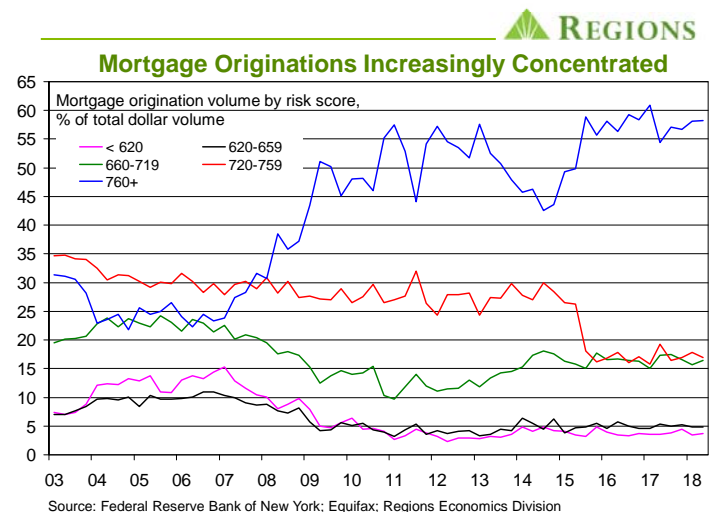
Aside from the question of just how big of a number \$10 trillion really is, there is the question of how that \$10 trillion is distributed across owner occupied households. As with any aggregate measure, it's hard to draw meaningful conclusions about what the magnitude of that measure means without any sense of how it is distributed, and the home equity data are no different. Consider that, according to data from the U.S. Census Bureau, there were 77.911 million owner occupied housing units as of Q2 2018. That does not, however, mean that each owner occupied household is sitting on over \$128,000 in untapped housing equity, as would be the case if \$10 trillion of untapped equity was evenly distributed across all owner occupied households. Right off the bat, there are roughly 1.6 million (estimates vary by source) households still in negative equity positions, and another sizeable group who, with equity positions of 5.0 percent or less, are barely above water, not far enough above to actually tap into the limited equity they have.

This is the first point to keep in mind in terms of distribution, i.e., while the rate of house price appreciation for the U.S. as a whole has been notably robust over the past several quarters, house price appreciation has been highly uneven on a market-by-market basis. Indeed, there are scores of markets in which house prices, as measured by the CoreLogic HPI, have yet to return to their prior cyclical peak, which is where you are likely to find larger numbers of underwater homeowners. Additionally, there is a large group of markets in which house price appreciation has significantly lagged the U.S. average, leaving many homeowners in these markets with only minimal equity positions. Uneven rates of house price appreciation tell us that untapped housing equity is at least to some degree geographically concentrated, which in turn tells us so too is the spending power represented by that untapped equity.

In addition to having become somewhat concentrated geographically, untapped housing equity has become somewhat

concentrated amongst households with higher credit scores. This is simply a reflection of patterns in mortgage lending in the years following the 2007-09 recession. This is a topic we've discussed in our write-ups of the Federal Reserve Bank of New York's quarterly reports on household debt. As data from these reports show, mortgage originations – amongst all lenders, bank and non-bank – have been notably concentrated amongst borrowers with credit scores at or above 760 in the post-recession years.

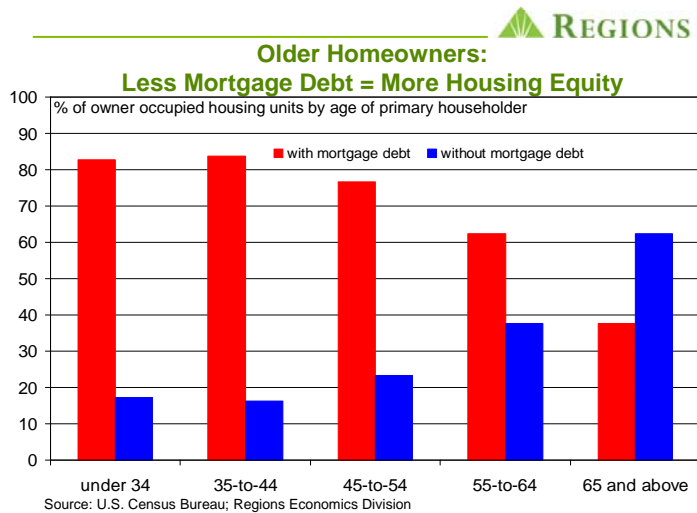
While there is not necessarily a strict mapping, data from the Home Mortgage Disclosure Act (HMDA) reports show mortgage loan originations have also become more concentrated amongst higher-income borrowers. Clearly, though they have eased over recent quarters, mortgage lending standards in the post-recession years have been far more stringent than had been the case in the years leading up to the recession. Another factor we've argued has contributed to this trend is that new home sales have for some time been atypically concentrated in the upper price ranges, which has simply reflected the dynamics at play in the housing market. It follows that incomes and credit scores of buyers able to afford those higher priced new homes would also be higher.



To the extent that those homeowners who have purchased homes over the past decade or so have seen their equity positions benefit from robust house price appreciation, it follows that the growth of untapped housing equity would be more concentrated amongst those homeowners with higher credit scores and higher incomes. This group of homeowners could be less likely to either want or need to tap into housing equity to finance current consumption.

In addition to being somewhat concentrated on the basis of geography and credit score/income, untapped housing is also concentrated amongst certain age groups. Recall that in last month's *Outlook* we discussed the concentration of owner occupied housing units amongst older homeowners. Data from the 2017 *American Community Survey* (ACS) show that units with a primary householder aged 55 or older account for 55 percent of the owner occupied housing stock, a share that has been rising steadily since the year 2000. To the extent these homeowners have been in their homes for longer than is the case with younger homeowners, it follows that they would have larger equity positions. Indeed, given that older homeowners are far less likely to have outstanding mortgage debt than are younger

homeowners, their equity positions tend to be significantly larger than those of younger homeowners. Data from the 2017 ACS show that 51.8 percent of owner occupied housing units with a primary householder aged 55 or above have no mortgage debt, and this age cohort accounts for 75.9 percent of all non-mortgaged housing units. These shares have risen steadily over time – as of the 2000 Decennial Census, 30 percent of all owner occupied housing units had no mortgage debt attached to them.



That the pace of house price appreciation has been so robust in many markets over the past several quarters has accelerated the growth in untapped housing equity amongst older homeowners. It is fair to ask just how likely these older homeowners are to liquidate housing equity and take on new debt at this stage of their lives. To be sure, this group may be inclined to liquidate at least some portion of their housing equity in the form of reverse mortgages over coming years. That said, they seem far less likely to tap into housing equity in order to finance a discretionary spending spree. This goes to our point that the various forms in which untapped housing equity is concentrated amongst certain segments of homeowners mean there is likely far less potential spending to be financed by untapped housing equity than is implied by simply looking at the aggregate total, even if we are unable to precisely quantify the degree to which this is the case.

It isn't only a matter of concentration, however, as there are other factors to help account for why homeowners are not more aggressively tapping into what, by any measure, has been a rapidly growing pool of housing equity. We'll start with what, at least to us, seems like stating the obvious. Though the current economic expansion is now in its tenth year, the 2007-09 recession was deep and it was painful, and time has not yet healed the wounds inflicted on U.S. consumers. Particularly those who got burned by the "it's not just a house, it's also an ATM" mentality that left many homeowners with more mortgage debt than they could realistically handle. To be sure, this was a cooperative effort on the part of borrowers and lenders, but both groups have been much more restrained this time around, and we don't think this will change to a meaningful degree any time soon.

There are other, more recent, factors that help account for why homeowners continue to sit on such a large pool of untapped housing equity. For instance, the 2017 tax bill took away much of

the favorable tax treatment that had been enjoyed by home equity debt since the 1986 tax bill. Specifically, whereas all interest on home equity debt had been tax deductible, the 2017 tax bill contained a provision stipulating that interest on home equity debt is now deductible only if the proceeds from equity extraction are used for home improvement. So, sure, if you want to liquidate the equity you've built in your home and buy a new car or buy a new boat or scratch whatever mid-life itch you may have, you can still do so, you just won't still get a nice tax break for doing so.

Interest rates may also be playing a role in the growing pool of untapped housing equity. Specifically, from mid-2014 through mid-2016 interest rates on 30-year fixed rate mortgage loans were below 4.0 percent. Those who took out a mortgage loan during this time may simply not be willing to now take on new debt at what will be a higher interest rate. And, even if up until now this has not been a significant factor, it will almost surely become more of a factor going forward as market interest rates push higher, including interest rates on home equity loans/lines.

With increasing numbers of homeowners opting to stay in place and opting to improve/renovate their homes, home equity would still seem like an attractive option for financing such work. Particularly given what are generally more attractive interest rates on home equity borrowing than on other forms of consumer debt. That said, the approval process on home equity loans/lines is still lengthy and cumbersome and often requires an appraisal be done on the underlying property. As such, more and more consumers seem to be gravitating towards speed and convenience when it comes to financing home improvement projects. Many retail outlets, in conjunction with financial institutions or non-bank lenders, are offering consumers point of sale financing on what amount to unsecured consumer loans which, at least to some extent, is acting as a substitute for borrowing against home equity.

So, in short, \$10 trillion doesn't get you as much as you might think, at least when it comes to untapped housing equity. As is often the case with the economic data, the rapidly growing level of untapped housing equity is more of a headline than a story. That homeowners are not more aggressively liquidating housing equity should not be a surprise in the context of patterns in total household debt, which is growing at a much slower rate during the current expansion than has been the case in past cycles. With household balance sheets much healthier now than has been the case for some time and with ongoing improvement in labor market conditions driving faster wage growth and helping sustain elevated consumer confidence, it is reasonable to expect consumers to be more willing to take on additional debt over coming quarters. But, as in life in general, the key here is to manage expectations. In other words, don't expect U.S. consumers to go on a \$10 trillion, or even a \$6 trillion, spending binge any time soon.

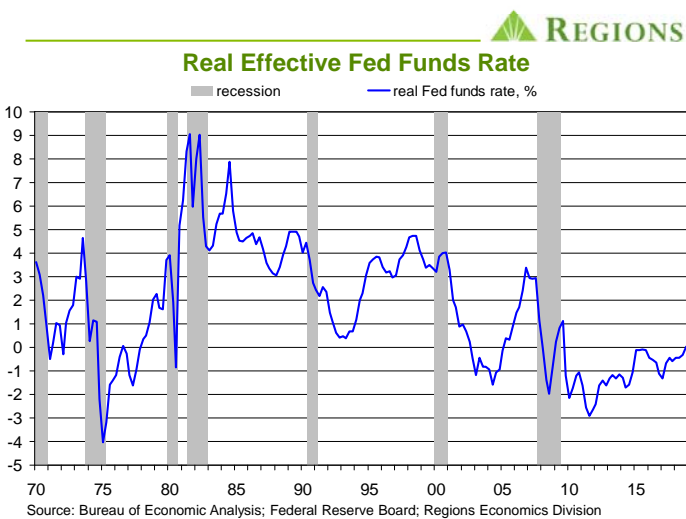
A Rose By Any Other Name Is Still Accommodative . . .

Wait, what? Okay, fine, so that may not be how line was originally written, but the meaning holds just the same. In the aftermath of the September FOMC meeting, much was made about the Committee's post-meeting policy statement. Not so much what the statement said, but what it no longer said, as the Committee opted

to strike the following sentence from the post-meeting statement: “The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation.” That this sentence was stricken from the post-meeting statement did not come as a big surprise, as the possibility was the source of considerable discussion ahead of the September FOMC meeting. The more relevant question, however, is what it means that this sentence is no longer there.

We think not much. Some interpreted its elimination as “dovish” signal that, with the Fed funds rate approaching neutral, the FOMC may be about to hit the pause button after the recent run of rate hikes. This interpretation, however, is at odds with the path of the funds rate implied by the “dot plot” issued in conjunction with the September FOMC meeting. The dot plot implies a total of four 25-basis point hikes in the Fed funds rate target range in 2018 and another three such hikes in 2019. Moreover, with the funds rate still far below the Committee’s estimate of the “neutral” funds rate, it is simply not reasonable to expect the FOMC to pause any time soon. For those who might, despite these signals, still be harboring doubts, in his post-meeting press conference Fed Chairman Powell stated that the removal of this sentence did not signal any change in monetary policy.

Our view is that the decision to strike the characterization of monetary policy as accommodative was all about the timing. In other words, the time to remove that characterization was when the cost of doing so, in terms of sending a potentially misleading signal to market participants, was basically zero. Had the Committee waited until the funds rate was higher, market participants very well may have taken the removal of this sentence as a sign that a pause in, if not the end of, the current rate hike cycle was close at hand, which in turn could have caused considerable turmoil in the markets had the FOMC hiked the funds rate at a subsequent meeting. Removing this sentence now, when it is, or at least should be, crystal clear that a pause is nowhere in sight was basically costless in this sense.



But, make no mistake about it, whether or not the FOMC chooses to refer to it as such, monetary policy remains accommodative and, as seen in the chart above, we’d say pretty significantly so. The real, or, inflation adjusted, effective Fed funds rate has been

negative since Q2 2009 and remained negative even after last month’s rate hike. The last value shown in the above chart is our forecast for Q4 2018, which assumes a 25-basis point hike in the funds rate and inflation, as measured by the PCE deflator, of 2.2 percent. This would put the real effective funds rate at 0.02 percent, positive, but not by much. More significantly, this would still leave the stance of monetary policy accommodative, and to a degree unjustified by the underlying economic fundamentals.

Forget about the dot plot and forget about Chairman Powell’s comments at his most recent press conference, the above chart is all anyone would need to see to understand that the FOMC is not close to hitting the pause button. At present, many peg the “neutral” value of the real funds rate at no less than 1.00 percent which, assuming inflation settles in at the FOMC’s 2.0 percent target rate, would leave us four 25-basis point funds rate hikes shy of neutral. Or, the exact number of hikes implied through year-end 2019 by the most recent dot plot. Keep in mind, however, that while the meaning of “neutral” is clear conceptually, in reality the neutral value of the Fed funds rate cannot actually be observed, nor is the neutral value set in stone. Instead, it varies with the underlying economic fundamentals. As such, it is possible, if not likely, that a year hence estimates of the neutral funds rate will be higher than at present. This simply goes to the point that, regardless of whether or not the FOMC opts to characterize it as such, monetary policy indeed remains accommodative, and more so than is warranted by current and expected economic growth. As such, don’t look for the FOMC to take a breather any time soon.

September Employment Report

Seems like only three pages ago, wait, it was only three pages ago, we were saying something about ignoring headline numbers and focusing on underlying details. That also applies to the September employment report. Nonfarm payrolls rose by 134,000 jobs, easily below expectations, but, prior estimates of job growth in July and August were revised up by a net 87,000 jobs. The soft September number, however, is more noise than signal. Calendar effects biased measured August job growth higher, and some of the increase of 270,000 jobs came at the expense of September job growth. Also, Hurricane Florence hit during the September survey period, which kept significant numbers of people from work and thus held down measured September job growth.

What is most relevant, however, is that over the past 12 months the U.S. economy has added an average of 214,000 jobs per month. At 3.7 percent as of September, the unemployment rate is lower than at any time since December 1969, though we continue to hold that there is still more slack in the labor market than is implied by the headline unemployment rate. For instance, over the past 22 months more than 4.5 million people per month have joined the ranks of the employed after not having been in the labor force in the prior month. This can’t go on indefinitely, but we think it has further to run, particularly as the cyclical portion of the decline in participation amongst the prime working age (i.e., 25-to-54 years old) population has yet to be totally unwound. While remaining labor market slack may well be weighing down growth in average hourly earnings, what is of far more significance is growth in aggregate wage and salary earnings, which has been running at a better than 5.0 percent pace (year-on-year) over the past four quarters. The bottom line is that, the soft September job growth print notwithstanding, the labor market remains rock solid.

ECONOMIC OUTLOOK



October 2018

Q1 '18 (a)	Q2 '18 (a)	Q3 '18 (f)	Q4 '18 (f)	Q1 '19 (f)	Q2 '19 (f)	Q3 '19 (f)	Q4 '19 (f)		2016 (a)	2017 (a)	2018 (f)	2019 (f)	2020 (f)
2.2	4.2	3.7	3.1	2.2	2.3	2.2	1.7	Real GDP ¹	1.6	2.2	3.0	2.7	1.5
0.5	3.8	3.6	2.8	2.4	2.2	2.1	2.1	Real Personal Consumption ¹	2.7	2.5	2.7	2.6	2.1
								Business Fixed Investment:					
10.8	7.0	6.4	6.1	4.7	4.2	3.5	2.6	Equipment, Software, & IP ¹	2.1	5.5	7.6	4.9	2.2
13.9	14.5	-0.4	4.6	5.9	4.4	2.8	2.1	Structures ¹	-5.0	4.6	6.0	4.4	1.1
-3.4	-1.3	-3.3	0.5	1.1	2.5	1.5	1.4	Residential Fixed Investment ¹	6.5	3.3	0.1	0.6	1.3
1.5	2.5	3.3	2.0	1.4	1.4	1.5	0.3	Government Expenditures ¹	1.4	-0.1	1.7	1.8	-0.2
-902.4	-841.0	-949.0	-931.9	-917.7	-920.7	-936.8	-955.0	Net Exports ²	-786.2	-858.7	-906.1	-932.5	-996.4
1.317	1.261	1.217	1.238	1.252	1.256	1.269	1.279	Housing Starts, millions of units ³	1.177	1.208	1.258	1.264	1.297
17.1	17.2	16.9	16.8	16.7	16.7	16.6	16.5	Vehicle Sales, millions of units ³	17.5	17.1	17.0	16.6	16.3
4.1	3.9	3.8	3.7	3.7	3.6	3.6	3.5	Unemployment Rate, % ⁴	4.9	4.4	3.9	3.6	3.6
1.5	1.6	1.7	1.7	1.5	1.4	1.2	1.1	Non-Farm Employment ⁵	1.8	1.6	1.6	1.3	0.8
4.4	2.5	2.0	2.2	2.6	2.2	2.5	2.4	Real Disposable Personal Income ¹	1.7	2.6	2.8	2.3	2.2
2.0	2.5	2.6	2.4	2.6	2.4	2.4	2.5	GDP Price Index ⁵	1.1	1.9	2.4	2.5	2.3
1.9	2.2	2.2	2.2	2.2	2.3	2.4	2.3	PCE Deflator ⁵	1.1	1.8	2.1	2.3	2.2
2.3	2.6	2.7	2.6	2.3	2.4	2.4	2.2	Consumer Price Index ⁵	1.3	2.1	2.5	2.3	2.0
1.7	1.9	2.0	2.0	2.0	2.1	2.2	2.2	Core PCE Deflator ⁵	1.7	1.6	1.9	2.1	2.2
1.9	2.2	2.3	2.3	2.2	2.4	2.5	2.5	Core Consumer Price Index ⁵	2.2	1.8	2.2	2.4	2.4
1.41	1.68	1.89	2.16	2.43	2.66	2.91	3.13	Fed Funds Target Rate Range Mid-Point, % ⁴	0.39	0.98	1.78	2.78	3.13
2.76	2.92	2.92	3.25	3.35	3.40	3.45	3.50	10-Year Treasury Note Yield, % ⁴	1.84	2.33	2.96	3.43	3.49
4.28	4.54	4.57	4.83	4.98	5.00	5.07	5.18	30-Year Fixed Mortgage, % ⁴	3.65	3.99	4.55	5.06	5.14
-2.4	-2.0	-2.3	-2.4	-2.4	-2.5	-2.7	-2.8	Current Account, % of GDP	-2.3	-2.3	-2.4	-2.6	-2.9

a = actual; f = forecast; p = preliminary

- Notes:
- 1 - annualized percentage change
 - 2 - chained 2012 \$ billions
 - 3 - annualized rate
 - 4 - quarterly average
 - 5 - year-over-year percentage change

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