William C Dudley: Evolving consumer behavior

Remarks by Mr William C Dudley, President and Chief Executive Officer of the Federal Reserve Bank of New York, at the National Retail Federation Annual Convention, New York City, 17 January 2017.

* * *

Andrew Haughwout, Joseph Tracy and Wilbert van der Klaauw assisted in preparing these remarks.

Good morning. It is a pleasure to have the opportunity to speak at this year's gathering of the National Retail Federation. Retail activity plays a key role in the U.S. economy, with consumption comprising about two-thirds of total gross domestic product. As such, understanding what is happening in your sector is critical in assessing the economic outlook—and, with that, the outlook for employment, inflation and interest rates. As always, what I have to say reflects my own views and not necessarily those of the Federal Open Market Committee or the Federal Reserve System

This morning, I will be focusing on retail spending—an important element of household consumption. But, I will do so in a way that's perhaps somewhat different from the usual approach, focusing in particular on the connections between housing and retail sales. I will argue that there have been some dramatic changes that have taken place in the way that households finance their consumption. I believe—and hope to convince you—that changes in the housing and mortgage markets have affected the willingness and ability of households to borrow, and that this, in turn, has had important consequences for the dynamics of consumption over the last decade. It is an important reason why the economic recovery and expansion have been weaker than we would like, despite the efforts of the Federal Reserve to stimulate economic activity. It also matters as we look forward. The good news is that, while the current expansion is quite old in chronological terms, it is still relatively young in terms of the health of household finances. Later in my remarks, I will talk a bit about the outlook for consumer spending in 2017 and beyond.

It's worth starting off with some background in order to develop the linkage between housing wealth and retail spending. Household incomes tend to increase as individuals grow older and become more skilled in their work and better matched to their employers. This tends to continue until they approach retirement age. This means that incomes are much higher later in life than when people first enter the workforce. Ideally, households would like to be able to even out their consumption based on their lifetime incomes, raising consumption in their early adulthood years. In general, this would mean that young people would consume a relatively high share of their incomes, while older people would save more. Indeed, young people might even wish to borrow against some of their future income so that they can enjoy some of those benefits earlier in their lifetimes.

However, there are limits on the ability to shift consumption to earlier in life through borrowing. One problem is that lenders don't have a reliable way to compel repayment of such debts. Consequently, the young may not have access to the credit they need to even out consumption to the extent they would like. A pledge of assets—collateral—can help to solve this problem, since it can be claimed by the lender in the event of a loan default.

For most households, the main form of wealth is human capital—the value of the wages that the household members can earn over the course of their lifetimes. But human capital cannot always be credibly pledged as collateral. For funding of educational investments, government intervention in the form of the federally-guaranteed student loan program helps address this problem. While private student loans exist, they typically require a co-signer with a strong credit record. Moreover, these borrowing sources are broadly restricted to education-related spending only.

The second most important asset on the balance sheet of many households is housing equity. So, in addition to being a source of shelter, housing can be a major form of collateral for borrowing for many households. In fact, for those households that have collateral available to secure loans, housing equity is by far the most important form of collateral.

What this tells us is that the performance of the housing and mortgage markets are important to the retail business. When home prices are rising and housing equity can easily be converted into cash, we can expect to see relatively high levels of consumption, all else equal. Conversely, when home prices are flat or declining, or mortgage credit is tight, this will put a damper on retail spending. Events of the last decade have driven this point home in a very clear way.

It is well known that beginning in the mid-1990s and intensifying in the early 2000s, there was a massive U.S. housing boom that dramatically increased the value of residential real estate in the United States. Over the period from 1995 to 2006, the aggregate value of real estate owned by households and nonprofits nearly tripled, rising from $8.6 trillion to nearly $25 trillion.

A remarkable, yet not widely-known, fact about this boom period is that while home values were rising very quickly, borrowing was growing almost exactly as fast. Rather than saving the extra wealth that was being generated by the housing boom, households were diverting a large share of it to other purposes. Indeed, the fraction of every additional dollar of households' housing wealth that was consumed seems to have been higher than that for financial wealth—such as investments in equities and bonds—suggesting that they viewed the increase in home prices as permanent.

In order to be able to assess the evolution of household finances more precisely, we worked with Equifax—a major credit bureau—to create a new database that tracks the credit files of a random sample of households over time. From this consumer credit panel data, we conclude that between 2004 and 2006, households were increasing their cash flow by over $200 billion a year by borrowing against their housing equity collateral. They supplemented that with another $185 billion through non-mortgage borrowing. So, at the height of the boom, annual consumption was being supplemented by around $400 billion in cash flow from debt, much of it collateralized by housing.

As we now know, homeowners were mistaken in viewing the home price increases during the boom as permanent. Things turned quickly as housing supply increased, home prices softened and mortgage underwriting standards tightened sharply as credit losses on residential mortgage lending climbed. The rise and fall of mortgage securitization activity marked by tranching mortgage cash flows into collateralized debt obligations (CDOs) exacerbated the downturn. Home values began to fall in mid-2006. By 2008, we saw a massive reversal in the way people used their housing equity to finance consumption. People went from borrowing hundreds of billions of dollars per year and increasing their mortgage debt, to paying back hundreds of billions dollars and reducing their mortgage debt. Households deleveraged even apart from the decline in household debt associated with the charge-offs from foreclosures. Instead of $400 billion in net cash flow from increased borrowing, this net cash flow sharply reversed to negative $150 billion by 2010, with increased residential mortgage debt pay-down being the main source. This rapid swing—a reduction of more than $500 billion on an annual basis—in the resources available for household consumption was associated with a sharp and prolonged slump in personal consumption expenditures during the Great Recession. Typically, consumption growth slows but remains positive during a recession. In contrast, consumption actually contracted by over $300 billion during the Great Recession.

Between 2009 and 2012, households continued paying down debt of all kinds—with the exception of student loans, which behave differently from most other forms of consumer borrowing. Ultimately, housing prices stabilized and began to increase again in 2012.

However, since that turning point in home prices over five years ago, something surprising has happened. Nationally, home values have risen over 40 percent since 2012, and are now very close to their pre-crisis levels on average—just 4 percent below their all-time peak reached in early 2006. Most other kinds of debt—first auto, and now, credit card debt—have joined student debt by starting to rise again, resuming their traditional role in financing consumption. The surprising development is that housing debt has stayed virtually flat. The previous behavior of using housing debt to finance other kinds of consumption seems to have completely disappeared. Instead, people are apparently leaving the wealth generated by rising home prices "locked up" in their homes.

The implications of this development have been quite significant for the retail sector. As I noted earlier, housing debt during the boom was rising at essentially the same pace as home values, leaving household leverage ratios more or less constant. If housing debt had risen apace with home prices since 2012—rather than staying flat as it has—then we would once again be seeing housing debt producing cash flows available for consumption of about $200 billion a year. Instead, households continue to divert about $200 billion annually to paying down their housing debt. That's a difference of roughly $400 billion per year, or about 3 percent of total consumption. Relative to historical patterns the household saving rate currently seems quite high, given the ratio of household net worth to disposable income.

So, why has household behavior with respect to housing debt apparently changed so much? As always, the data reflect the result of the interaction between the demand and supply sides of the credit market. One obvious demand-side candidate is that consumers may have become more cautious about housing's value as a financial investment, or its value as collateral for borrowing to finance consumption. That is, households may have come to view housing wealth as more similar to financial wealth in that changes can be transitory rather than permanent. Consequently, it may be viewed as prudent not to spend too much out of increases in these sources of wealth. Additionally, the deep job losses that occurred during the Great Recession may have also impressed on households the need for precautionary savings against adverse income shocks.

In fact, the lessons from the housing boom and bust may have been even more traumatic. There are many versions of this story, and most have a word like "scarring" in them. Perhaps some potential homeowners, having seen the wild gyrations in home prices during the 2000s, have soured on homeownership altogether. This would result in a reduced homeownership rate due to a loss of confidence in housing as a good financial investment. Data indicate that homeownership has declined, especially among younger workers. However, households in our Survey of Consumer Expectations continue to report that they believe that housing is a sound financial investment. So, the explanation for our declining homeownership rate doesn't appear to be that homeownership has lost its luster as an investment. And, reduced homeownership doesn't explain why people who still own homes have become less likely to tap their available equity to finance consumption.

Other households may have been scarred by the experience of seeing their neighbors who borrowed heavily during the boom lose their homes and have their credit ratings badly damaged. Observing these consequences may dissuade current homeowners from making themselves vulnerable to foreclosure by borrowing against rising home values. This would lead to an increase in a household's precautionary demand for savings in the form of higher housing equity. This increased equity cushion would guard against the risk that the household could find itself in a negative equity position in the event of a future decline in home prices. With an equity cushion, even if the household were to experience a job loss during a future housing downturn, they would be able to sell their home, pay off the mortgage and avoid any damage to their credit.

Homeowners' desire to finance consumption by borrowing against housing equity might also be diminished by their desire to retain their ability to move easily. The decline in home prices during the bust eliminated many households' home equity, which is traditionally the source of down payments for households that wish to move and remain homeowners. This mobility might be associated with a change of labor markets or an upgrade of your home or residential location. It is possible that households have saved their newly recovered equity in order to rebuild the capacity to make future down payments and therefore restore this option to move. It is certainly the case that mobility has declined since the housing bust, a fact consistent with this hypothesis.

Many homeowners also took advantage of the Federal Reserve's accommodative monetary policy stance to refinance into very low fixed-rate mortgages. As mortgage rates rise, there is a higher financial cost to extracting housing equity through a cash-out refinancing. The pace of cash-out refinancing has indeed been very low even as housing equity has risen, consistent with this hypothesis. But, owners have other ways of tapping equity, like taking out a second mortgage or a home equity line of credit (HELOC). Interestingly, these forms of housing debt have been paid down even more aggressively than first mortgages. So, the fluctuation in the level of mortgage rates also does not explain the change in household behavior.

A final factor that may be reducing the demand for home equity extraction is a change in the distribution of housing equity in the population. Even though aggregate home equity is back to pre-crisis levels, the data indicate that the growth in equity since 2012 has gone disproportionately to older, wealthier households. Presumably, these households have less demand for credit to fund their consumption plans. In contrast, those who would like to convert housing wealth into retail purchases have not yet seen their housing equity restored to its earlier levels—reflecting, in part, slower rates of mortgage balance paydown. In addition, younger and less credit-worthy households also experienced higher relative declines in homeownership rates.

While some of these demand-side factors seem to be playing a role in reducing home equity extraction, there is undoubtedly a strong supply-side effect in operation as well. Our consumer credit data indicate that lenders' adoption of minimum credit scores for mortgage lending and their considerably more rigorous underwriting standards for HELOCs have played a very important role in limiting consumers' ability to convert home equity into new consumption. The drivers of this change in lender behavior are complex, but are likely to include a combination of more regulation and stress testing of banks' portfolios, more conservative practices by the government sponsored enterprises Fannie Mae and Freddie Mac—which tend to dictate underwriting practices for a large part of the market—and banks' own experience from the crisis period, when so many lenders faced extreme stress and residential real estate seemed to be the main culprit.

The fact that housing prices declined so much and that the foreclosure process was so often drawn out may also have caused lenders to reassess how much to rely on the housing collateral as security for their loans. In response, lenders may have shifted their underwriting to put more weight on the creditworthiness of the borrower rather than relying mainly on the value of the collateral. This is consistent with the fact that mortgage credit is now much harder to get for lower credit-rated borrowers than during the housing boom.

So, what's next? When and to what extent will households again start tapping home equity to fund their consumption? Answers to these questions will determine the degree to which housing equity growth will add to income growth as a fundamental driver of consumption. We do not want to repeat the experience from the housing boom, but there are prudent ways for households to access their housing equity.

It is hard to predict when the recent trends might change, given that some milestones have passed that could have reignited lenders' and borrowers' appetite for home lending. First, home prices stopped falling in 2010, which could have been taken as a signal that a complete collapse was not imminent and that the worst was behind us, yet mortgage borrowers continued to divert cash to paying down their debts. Second, home prices—and home equity—resumed their growth in 2012, indicating that the market was recovering. Yet, far from extracting this equity, borrowers continued to pay down their mortgages thereby reinforcing the effect of the home price increases in terms of rebuilding housing equity. Aggregate home prices and home equity have almost reached their previous peaks.

Time will tell if there is a renewed appetite, on both lenders' and borrowers' parts, to convert housing wealth into consumption. Perhaps, we will soon see a recovery in cash-out refinancing and in HELOC borrowing as a means for households to expand their consumption. In this case, the household saving rate will begin to decline. Or, we may need to wait longer for households to feel confident enough to extract some of their home equity, and for lenders to decide that expanding such lending is safe enough for their balance sheets. Whatever the timing, a return to a reasonable pattern of home equity extraction would be a positive development for retailers, and would provide a boost to aggregate growth. In the meantime, consumption growth will largely be determined by income growth, the trajectory of wages and the strength of the labor market.

The U.S. expansion is now in its eighth year. By historical standards, it is long in the tooth. Despite this, I am optimistic that the economic expansion will continue over the next few years. First, it is important to note that economic expansions don't simply die of old age. Usually, they end either because inflation climbs and the Federal Reserve responds by shifting to a much tighter stance for monetary policy, or because the economy gets hit with a large unanticipated shock that the Fed and the fiscal authorities cannot respond to quickly enough, or with sufficient force, to prevent an economic downturn. While economic shocks are, by their very nature, difficult to forecast, the risk that the Fed will snuff out the expansion anytime soon seems quite low because inflation is simply not a problem. Not only are underlying inflation trends very subdued—for example, the core personal consumption expenditures deflator has risen at only a 1. 7 percent annual rate over the past year—but the economy is not growing much above its sustainable long-term pace. Thus, while pressures on labor resources have been increasing, but quite slowly. Finally, the recent strengthening of the dollar will put downward pressure on import prices and limit the ability of domestic producers to raise their prices.

Second, the household sector's financial condition is in unusually good shape for this point in the economic cycle. Household indebtedness is relatively low, debt service burdens relative to household income have fallen to levels not seen since at least the early 1980s. Moreover, household incomes are rising at a moderate pace, supported by continued job gains and some modest strengthening of wage compensation trends. If households and lenders again become comfortable with financing consumption with debt in addition to income, this will provide additional support to household spending and to the current economic expansion.

The challenges in the retail space over the near term, therefore, are not likely to be a shortfall of aggregate demand from households. Instead, it seems to me the challenges lie more in how to satisfy households' changing demands for goods and services, and the medium through which these demands are satisfied—whether it be brick and mortar or online. Also, there is the important issue of how to retain brand loyalty in a world where information is ubiquitous and always near at hand, and it is easy to shift purchases among participants in the retail marketplace.

Thank you for your kind attention.