

# Economics Group

## Special Commentary

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# Shifting Burdens of Household Debt

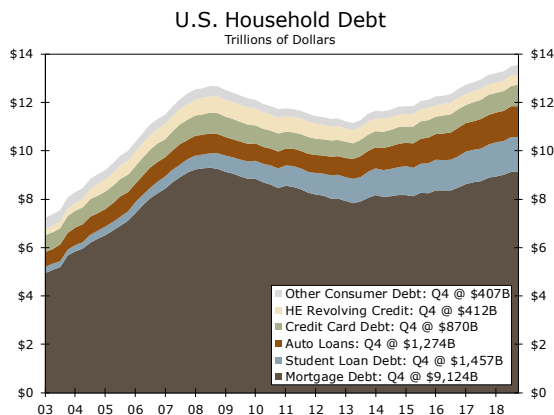
## Executive Summary

Household debt in the United States is higher now than it was at the height of the prior cycle, which has brought dire warnings about leverage and the inevitable comparisons to debt levels in 2008. There are reasons to be circumspect about the composition of household debt, and too much leverage was indeed a large part of what went wrong in the lead-up to the financial crisis, but the hand-wringing about reaching “all-time highs” in household debt are misplaced, in our view. As long as assets, income and the broader economy are rising along with it, rising debt itself is not disconcerting.

*Rising debt itself is not disconcerting.*

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

**Figure 1**



**Figure 2**



*Almost all of the growth has been concentrated in student and auto loans.*

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

## Health of U.S. Household Debt

Aggregate household debt has been climbing on an uninterrupted basis since 2014. In the fourth quarter of 2018, the debt burden of households was \$869 billion above its prior peak back in 2008 at the start of the recession<sup>1</sup> (Figure 1). But a growing level of household debt is not necessarily alarming. If assets, income and the broader economy are rising, debt *should* be increasing as well. It is when debt is growing in excess of these measures that it becomes a concern for the future of consumer spending and, more broadly, economic growth. In order to assess the indebtedness of households, it is therefore useful to analyze household debt as a share of disposable income.

<sup>1</sup> Donghoon Lee and Wilbert van der Klaauw, “An Introduction to the FRBNY Consumer Credit Panel”, FRBNY Staff Report no. 479, November 2010.

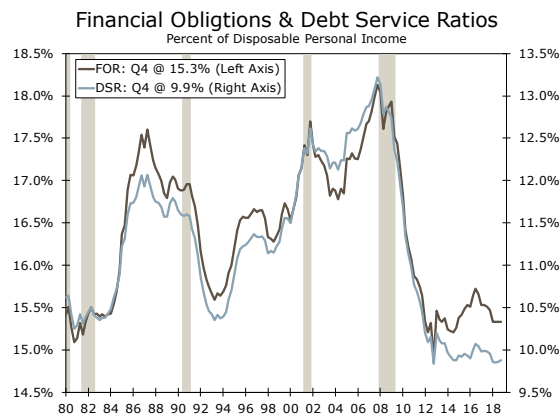
Together we’ll go far



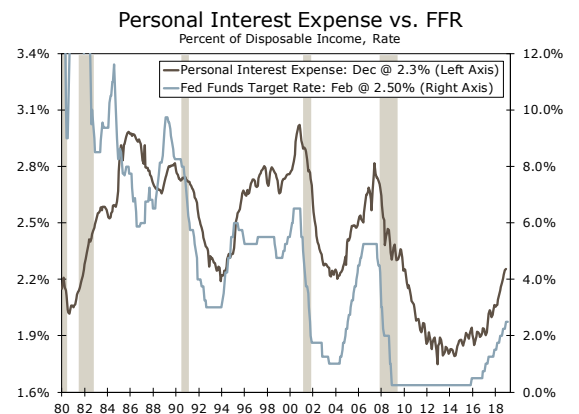
**Total household debt is about 86% of disposable income.**

Total household debt was about 86% of disposable income in Q4-2019, down from about 115% right before the 2008 crisis. After declining steadily since the end of the Great Recession, household debt as a share of disposable income has more or less moved sideways over the past four years (Figure 2). In analyzing the actual debt burden faced by households, we turn our attention to the amount of interest relative to household income. The Federal Reserve measures the household Debt Service Ratio (DSR) and the Financial Obligations Ratio (FOR), which estimate debt payments to disposable personal income.<sup>2</sup> Both the DSR and FOR remain at or near historic lows, suggesting households' quarterly debt payments remain small (Figure 3). One may reasonably wonder why we have not seen these ratios climb as the Fed has increased interest rates by 200 bps since late 2015. But, given that mortgages account for roughly two-thirds of total household debt (reference Figure 1) and since most mortgages have fixed-rate structures, American households have relatively low interest rate sensitivity.

**Figure 3**



**Figure 4**



Source: Federal Reserve System, U.S. Department of Commerce and Wells Fargo Securities

Personal interest payments, however, which consist of all interest paid by individuals *except* mortgage interest, have been rising as a share of disposable income since the Fed started hiking rates in late 2015 (Figure 4).<sup>3</sup> Even with a sizeable increase in 2018, at 2.3% of total disposable income in December interest expense is only beginning to reach the lowest level of burden experienced in the prior two business cycles. With households' debt burdens still relatively manageable, we do not expect debt payments to constrain consumer spending at this time.

### The Shifting Composition of Household Debt

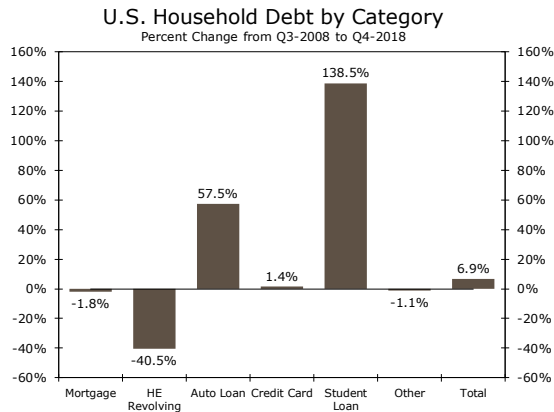
The shifting composition of household debt is more troubling than its overall rise. To analyze how consumer debt has evolved throughout the current expansion, we need to pick a starting point for our measurements. Because total outstanding consumer debt peaked in the third quarter of 2008, we believe that is a reasonable place to start. At the risk of oversimplification: the growth in consumer debt is due entirely to student and auto lending (Figure 5 & Figure 6).

**The shifting composition of debt is more troubling.**

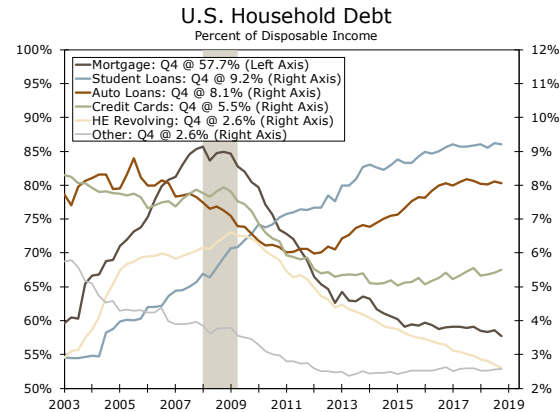
<sup>2</sup> The DSR includes mortgage payments and consumer debt payments, while the FOR includes rent payments on tenant-occupied property, auto lease payments, homeowners' insurance and property tax payments. For additional detail please see, "[Household Debt Service and Financial Obligations Ratios](#)".

<sup>3</sup> Personal interest payments as defined by the Bureau of Economic Analysis (BEA) in the Appendix of the NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts. Page 402.

**Figure 5**



**Figure 6**



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

*Mortgage: Largest Category & Quite Steady though Home Equity Loans Retrenching*

Mortgage debt still reigns supreme as the largest overall category of consumer debt. With an outstanding balance totaling \$9.1 trillion, mortgage debt comprises just over two-thirds of the roughly \$13.5 trillion of total debt outstanding. This category has been relatively steady for the past decade or so, at roughly 60% of disposable income.

At the height of the prior cycle, a common refinancing strategy involved consolidating higher-interest consumer debt into home equity lines of credit. Perhaps not surprisingly, home equity lines of credit are a much smaller category today and there has been a clear downward trend over the past ten years, from over \$700 billion in 2008 to just about \$410 billion as of the end of 2018.

*Auto Loans: Riding Higher*

Credit card balances have also been rising on trend for the past few years, but only barely crested above the 2008 high in the fourth quarter of 2018. If consumers have been more careful about loading up too much debt on the credit card, there has been no such reluctance when it comes to borrowing funds to finance their ride.

Not only are total auto loans outstanding more than half again as large as they were in 2008 (up 57.5% precisely), the funds households are borrowing to finance their vehicles have never comprised such a large share of household borrowing. The current dollar amount of \$1.3 trillion in auto loans represents a 9.4% share of total household debt, a record high.

*Student Loans: The Monkey on the Back of Younger American Households*

As recently as 2009, student loan debt was the smallest category of consumer loans. Things have changed dramatically since then. As the U.S. economy shed almost 9 million jobs during the recession and employees pared back hiring, a lot of displaced workers either went back to finish college or sought out advanced degrees to deepen their skillsets. That shift back to school combined with the rising cost of tuition culminated in a more than doubling in student loan debt (138.5% increase) since Q3-2008.

**Autos Putting Up Bigger Numbers on Credit Scoreboard**

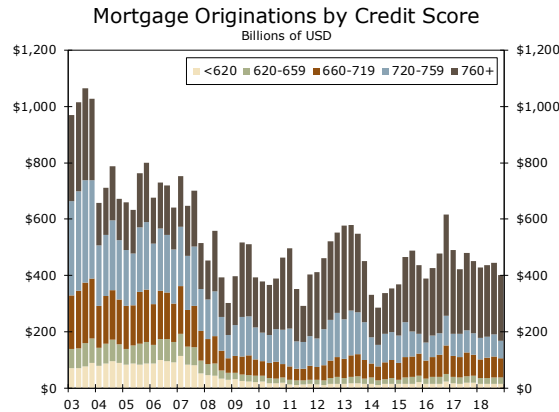
Too much lending to “sub-prime” borrowers, or borrowers in the bottom credit score categories, was one of the issues that contributed to household over-indebtedness in the prior cycle. As previously discussed, mortgage credit outstanding is essentially unchanged from its 2008 peak. Largely a reaction of the Great Recession, mortgage originations shrank among all credit categories except for those borrowers with the highest credit scores (Figure 7). Throughout this cycle, access to capital for sub-prime borrowers has all but dried up, or at least it has for mortgages.

**Mortgage debt has been relatively steady.**

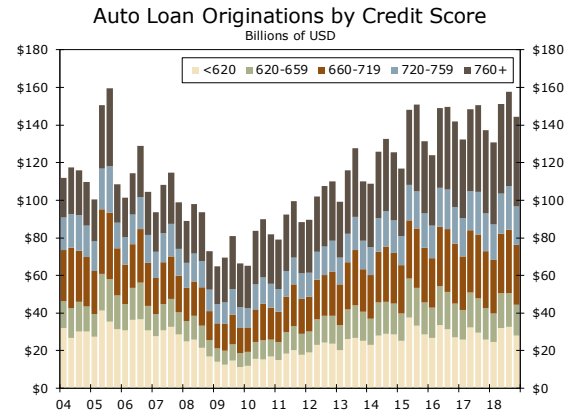
**Student debt has more than doubled since 2009.**

*Auto loan growth is not surprising with robust access to capital across the credit score spectrum.*

**Figure 7**



**Figure 8**



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

But, with more than \$40 billion of originations to borrowers with a credit score below 660, access to credit for auto loans is still readily available (Figure 8). In fact, the dollar amount for originations is spitting distance from where it was at its height in 2008. Perhaps the 57.5% growth in auto loans in this cycle should not be surprising when access to capital is so robust across the credit score spectrum.

It bears noting here the strength in 2018 auto loans was largely a function of increased lending to the highest credit score borrowers, while originations to those with lower scores have levelled off over the past couple of years. Due to the larger share of higher-credit score originations, it is fair to say that the overall auto loan stock is in good shape in terms of quality, even though it is also true that there is a greater willingness to lend to lower credit score borrowers for autos than there is to offer those same borrowers a mortgage.

*You can't drive your house to work.*

For households struggling to make ends meet, the reality sets in that you can't drive your house to work. Studies looking into the hierarchy of consumer payments reveal that reality and explain why there is often greater availability of *auto* financing to lower credit consumers than other types. An analysis by TransUnion found that of those consumers who have a bankcard, auto loan and a mortgage, those households are far more likely to default first on a mortgage than on any of the other two trade types, rather than miss a car payment<sup>4</sup>.

### Does Staying in School Prevent Juvenile Delinquency?

The big issue with household debt is student loans. There are a few things that are clear from even a cursory glance at Figure 9. The first is that for the younger age cohorts, student loans comprise a larger piece of the pie than it does for older households.

Student loans are the largest category of debt for the youngest households (18-29 year olds), who owe more in student loans than they do on mortgages. One influences the other, of course; mountains of student loans make it harder to save for a down payment to get a mortgage in the first place. A study by the New York Fed found that higher tuitions and student loans can explain between 11 and 35% of the roughly eight percentage-point decline in homeownership for younger households<sup>5</sup>.

Another clear take-away is that for households over 40, the mix of debt product types is remarkably similar. The oldest households (the over-70 crowd) have a slightly larger share of their household debt in home equity lines of credit or in credit cards. The 40-49 year old group also has a slightly larger share of student loans than other older adults.

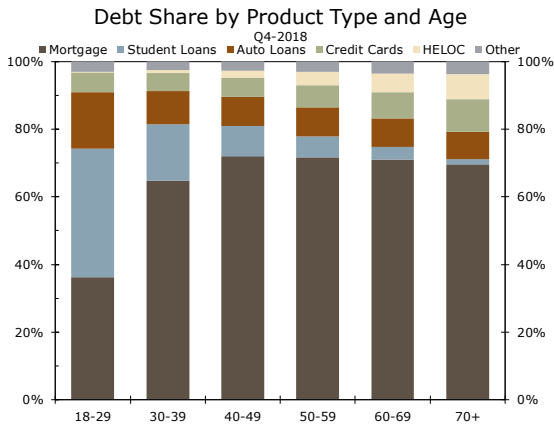
<sup>4</sup> [“Payment Hierarch Analysis: A Study of Changes in Consumer Payment Prioritization from 2007-2011”](#), TransUnion White Paper, Komos, Reardon, Wise and Becker, 2012.

<sup>5</sup> [“Echoes of Rising Tuition in Students’ Borrowing, Educational Attainment, and Homeownership in Post-Recession America”](#), NY Fed Staff Reports, July 2017.

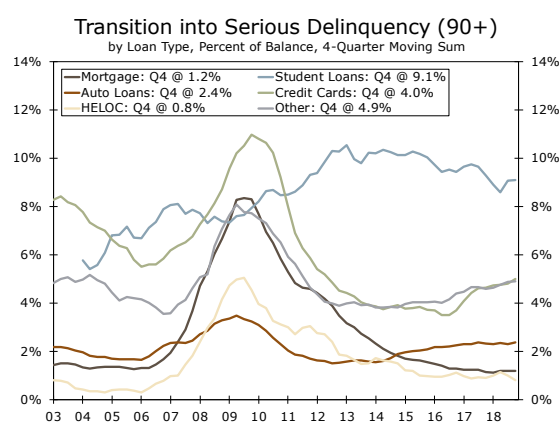
So the category that has seen the largest overall increase since 2008 on both a percentage basis and in dollar terms is student loan debt. How are these borrowers doing in terms of staying current on their loans? Getting a rock-solid answer on this question is not as straight-forward as it initially appears. A footnote in the NY Fed’s report says that “*delinquency rates for student loans are likely to understate effective delinquency rates because about half of these loans are currently in deferment, in grace periods or in forbearance and therefore temporarily not in the repayment cycle. This implies that among loans in the repayment cycle delinquency rates are roughly twice as high.*” Delinquencies on student loans rose to 10.5% in 2013 from about 7.5% in 2008 and have since moved marginally lower (Figure 10).

***In 2003, student loans made up a tiny 3.3% share of total debt.***

**Figure 9**



**Figure 10**



***Student loans now represent 10.8%.***

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

A different way to think about this is to simply consider how much more of the total debt pie is made up of student loans today. At the start of the data series in 2003, student loans made up a tiny 3.3% share of total household debt. It was by far the smallest category—less than half the size of auto loans, credit cards or even the remnant category “other.” Ten years ago, when household debt peaked in 2008, student loans had swollen to a roughly 5% share, but as a category was still smaller than auto loans or credit cards. As of Q4-2018, student loans totaled almost \$1.5 trillion, and with a 10.8% share of total household debt it is the largest category after mortgages.

**Conclusion**

U.S. household debt amounted to \$13.54 trillion in Q4-2018, roughly 7% higher than the level of total household indebtedness at its prior peak in Q3-2008. However, considered in context as a share of disposable income, household indebtedness remains reasonably stable. Debt-service or financial-obligation ratios demonstrate that households financing costs remain manageable.

***Debt acts as a governor on the future pace of consumption growth.***

We are far less sanguine when it comes to student loan debt. The \$1.5 trillion mountain of student loan debt is not likely a catalyst for recession, but it certainly acts as a governor on the pace of future consumption growth.

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