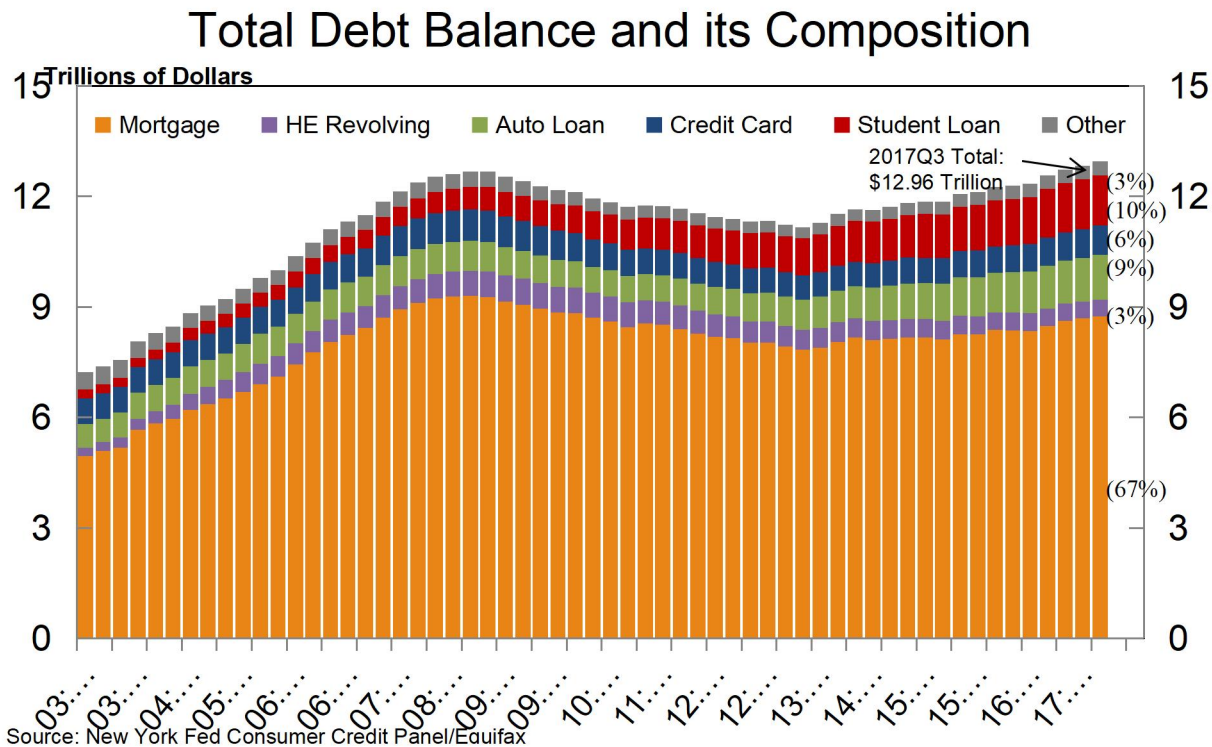


Emad A. Zikry, President and Chief Executive Officer

Should the Recent Rise of Household Debt be a Cause of Concern?

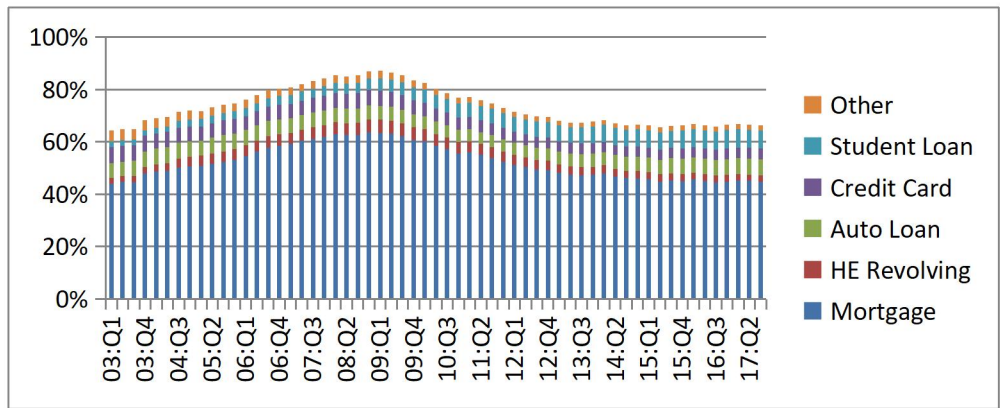
Total household debt is back on the rise. According to the latest figures from the New York Fed, total debt increased nearly \$200 billion to an all time high of \$13.15 trillion at year-end 2017. As shown in the graph below, the trajectory of household debt has been on the rise since approximately 2013. Prior to then, debt had been on a downward trend since its peak during the great financial crisis. An interesting phenomenon has been the rising share of debt accounted for by student loans and auto loans. Both of these components of debt have surged to nearly 10% of the total as of year-end 2017.

Figure 1: Household debt (levels)



While the gross debt levels suggest that problems may be developing in the consumer sector, comparing these data points relative to GDP eases these concerns. Figure 2 below, plots household debt relative to GDP. As demonstrated in the graph, debt as a proportion of GDP (income) has actually been declining since the last recession and recently stabilized at percentages last seen in the early 2000s. That is to say, the consumer has actually been deleveraging relative to income. This suggests that households are better positioned to service the larger debt loads as incomes are rising faster than liabilities.

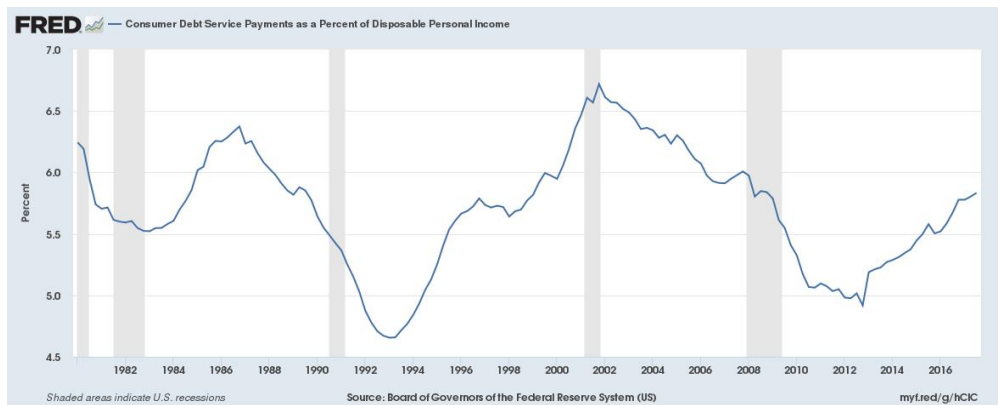
Figure 2: Household debt as a % of GDP



Source: Federal Reserve Economic Data (GDP) and FRBNY (Household Debt)

Looking at the ratio of debt service to disposable income further strengthens this notion. Debt service relative to disposable income has been on the rise lately, yet appears to have tapered its ascent at pre-recession levels. Figure 3 shows the behavior of this indicator over time. As shown in the graph, the debt service ratio improved during the initial phases of the recovery and proceeded to rise as the expansion progressed. Nonetheless, the indicator is not near its previous peak.

Figure 3: Debt Service as a % of Disposable Income



To conclude, aggregate debt has been on the rise, yet once compared to GDP they have actually fallen, suggesting that consumer balance sheets are continuing their deleveraging. This state of affairs greatly eases concerns with respect to overburdened households at the macro level, as GDP has risen faster than debt. Similarly, the noticeable shift away from mortgages into student loan and auto loan debt doesn't seem to be troublesome. This is because student loans, presumably, represent an investment in human capital which should increase income in the future. If they fail to do so, then it would be a source of concern in the future. Particularly since these liabilities cannot be discharged in bankruptcy. In the same vein, the increase in auto loans represents the financing of transportation assets. Accordingly, it also has the potential to increase the productive capacity of the borrower. It would be more concerning if a greater share of debt were being accounted for by credit cards or other loans that finance current consumption.

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Emad is the Managing Partner and Chief Executive Officer of Vanderbilt Avenue Asset Management LLC. Vanderbilt's client base includes Multi-national Corporations, Public Funds, Foundations/Endowments, and Taft Hartley accounts.

Previously, Emad was Chairman of Institutional Business at Pioneer Investments. Pioneer investments has more than \$300 Billion in assets under management. The parent of Pioneer, UniCredit S.p.A., is the largest bank in Italy and the second largest bank in Europe. Pioneer had purchased Vanderbilt Capital Advisors, of which Emad was the founder and Chief Executive Officer.

Emad has had numerous articles published in professional and academic journals such as The Journal of Forecasting, The American Economist and The Journal of Fixed Income. He is a Board member of The National Investment Company. Emad was a member of the Board of Advisors of the Pacific Institute, The Advisory Committee of Fulcrum Global Partners, The Chief Executive Officers Club and formerly a board member of The Foreign Policy Association. He also served on the Board of Directors of the University of Albany Foundation, NextGen Healthcare Inc., The Park Avenue Bank, AA Bank and The New Providence Fund and Associates LP.

Emad is an FINRA Arbitrator. He is also a member of the National Association for Business Economists and The Economic Club of New York. Emad served as an adjunct professor at the University of Kansas and St. John's University.

Emad holds a Bachelor of Science from the University of Albany, and a M.A. and Ph.D. in Economics from the University of Kansas.