

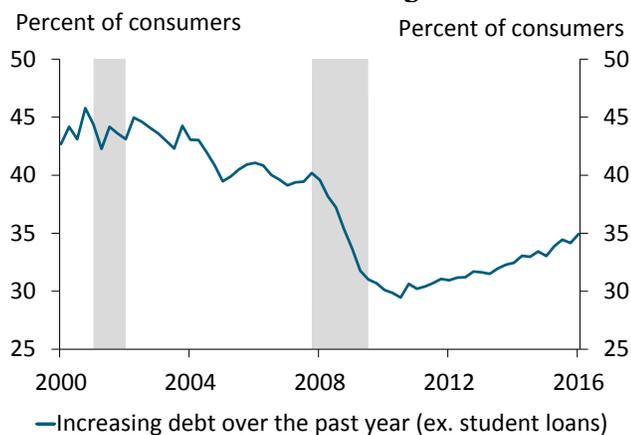
## Tracking Consumer Credit Trends

By Troy Davig and William Xu

*The percentage of consumers increasing their debt has steadily risen since 2013. Underlying this trend, however, are sharp differences. A larger share of consumers with lower credit scores have been increasing debt levels than those with higher credit scores. In particular, the share of auto loan borrowing by consumers with lower credit scores has risen steadily but has moved only modestly higher for those with higher credit scores.*

The Great Recession marked a turning point for the growth of consumer debt. Total outstanding consumer debt, excluding student loans, peaked in late 2008 and fell by nearly 2 trillion dollars by mid-2013. Consumer debt began to rise once again in mid-2013 and has continued to trend higher since, though it remains below its 2008 peak. More broadly, the share of consumers increasing their debt has been steadily rising since 2013, though there are substantial differences across consumers. Those with lower credit scores have seen a more broad-based increase in borrowing and have been more willing to borrow than consumers with higher credit scores since the middle of 2015.<sup>1</sup>

**Chart 1: The percentage of consumers increasing their debt continues to trend higher**



Sources: Equifax, Federal Reserve Bank of New York Consumer Credit Panel and National Bureau of Economic Research.

As Knotek and Braxton (2012) discuss, much of the post-crisis consumer deleveraging occurred through a steep decline in the number of consumers taking on more debt. Davig and Braxton (2014) discuss the reversal of this trend, as the share of consumers increasing debt began rising in mid-2013. We follow this previous work by using the Federal Reserve Bank of New York's Consumer Credit Panel. This data is a nationally representative sample of individual, anonymous credit records maintained by Equifax that follows the same consumers each quarter. The focus of our analysis on the percentage of consumers who increased their debt over the previous year, which we define as the breadth of borrowing, in order to distinguish broad-based trends in consumer credit from movements driven by a few households amassing large amounts of debt. To illustrate, Chart 1 shows the upward trend in the breadth

of borrowing since 2013. As of 2016:Q1, 35 percent of consumers had higher debt than a year earlier. This level, however, is below the average of 42 percent from 2002 to 2007.

The share of consumers increasing debt is useful as a measure of the breadth of borrowing, but can obscure underlying trends. For example, Chart 2 shows this same measure for consumers with credit scores in the highest quartile (the top 25 percent) as well as the lowest quartile. The chart shows that consumers with lower credit scores have largely driven the increase in the share of consumers accumulating debt. The breadth of borrowing by these consumers has risen significantly over the past several years and is nearly back to its pre-crisis level. In contrast, the share for consumers with higher credit scores has remained largely flat and is even a bit lower

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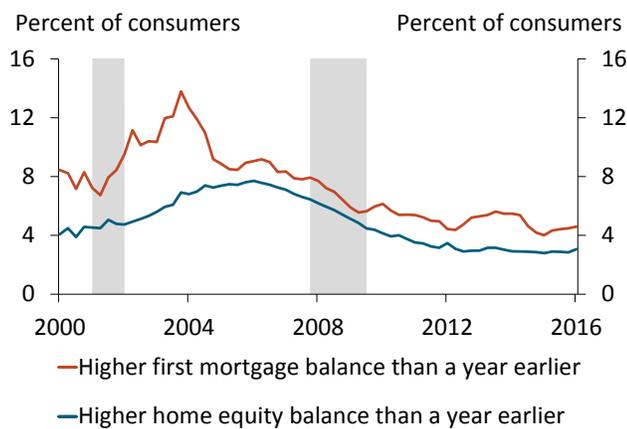
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than its post-crisis level. For the first time since the Great Recession, more consumers with credit scores in the lowest quartile are increasing borrowing than those with scores in the highest quartile.

We also see different trends in the type of debt consumers have accumulated. Charts 3 and 4 show that the recent increase in the share of borrowers is primarily due to consumers increasing their credit card and auto loan debt. Chart 3 shows the shares of consumers increasing balances on home equity loans and first mortgages have remained around 4 percentage points lower than their pre-crisis levels.

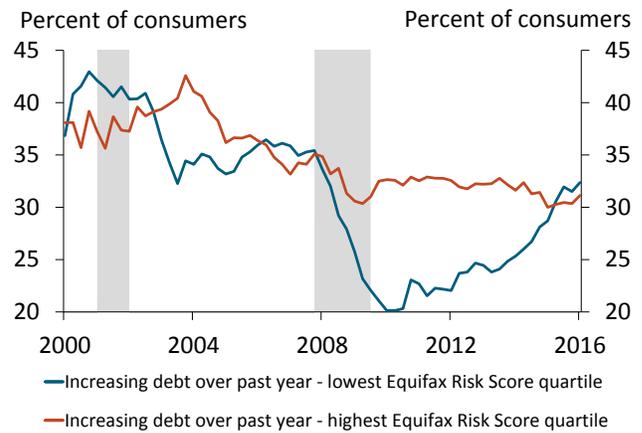
**Chart 3: The share of consumers increasing borrowing against their homes has remained flat**



Sources: Equifax, Federal Reserve Bank of New York Consumer Credit Panel and National Bureau of Economic Research.

Consumers with lower credit scores have primarily driven the increase in auto debt borrowing. Chart 5 compares consumers with credit scores in the highest and lowest quartiles and shows the rise in auto loans has been more pronounced among those with lower credit scores. Since 2010:Q1, the share of consumers with lower credit scores increasing their auto debt has grown from 6 percent to almost 15 percent. In contrast, the share of those with higher credit scores shows only a modest upward trend, with even a modest tick down more recently.

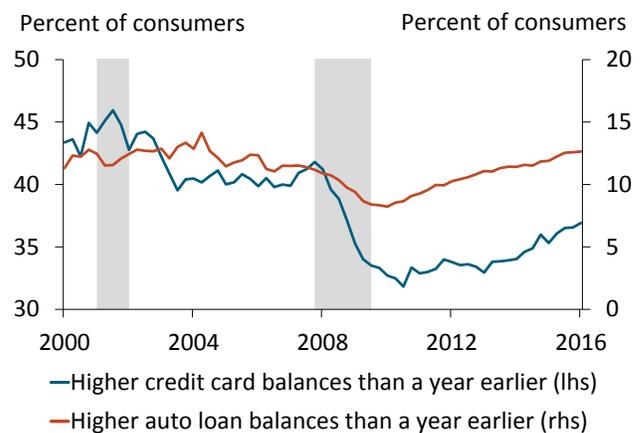
**Chart 2: The share of consumers with lower credit scores increasing their debt has risen**



Sources: Equifax, Federal Reserve Bank of New York Consumer Credit Panel and National Bureau of Economic Research.

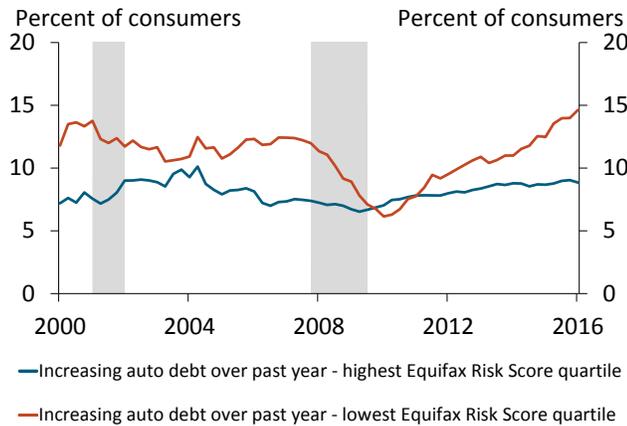
In contrast, Chart 4 shows that the shares of auto and credit card borrowers increased by about 4 percentage points from their 2010 lows. The rise in the share of borrowers taking on more auto debt has also been steeper than that of credit card debt. While auto loan borrowing has more than recovered from its post-recession decline, the share of borrowers increasing their credit card debt is still about 4 percentage points below its pre-recession level.

**Chart 4: The share of consumers increasing credit card and auto loan balances has been steadily rising**



Sources: Equifax, Federal Reserve Bank of New York Consumer Credit Panel and National Bureau of Economic Research.

**Chart 5: Consumers increasing auto debt has been mostly among those with lower credit scores**

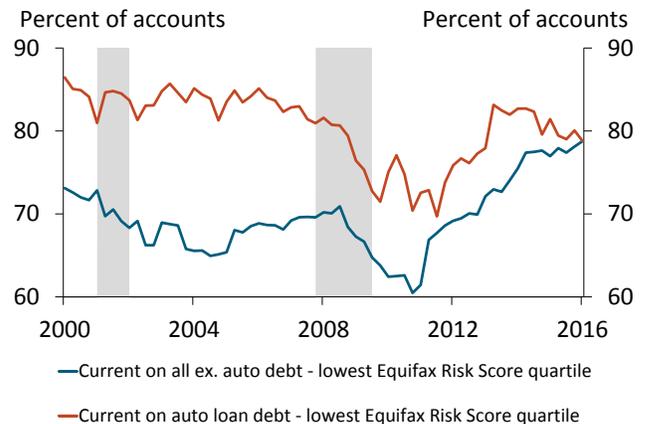


Sources: Equifax, Federal Reserve Bank of New York Consumer Credit Panel and National Bureau of Economic Research.

A few broader issues may be associated with rising delinquency rates on auto loans. First, late or delinquent payments are a likely sign of financial strains that may weigh on these consumers' ability to increase spending on other goods and services. Second, demand for new autos has been a significant factor supporting consumer demand. For example, total light-weight vehicle sales doubled from their crisis low of 9 million units in February 2009 to 18.1 million units in October 2015. Since then, however, sales have declined to 16.6 million in June 2016. As a result of both increasing delinquency rates and an overall rise in the number of borrowers over the past few years, auto demand from those with lower credit scores may face some headwinds going forward.

Whether such trends should be of concern is unclear. Increasing debt to buy a long-lived asset, such as a car, or to smooth through temporary and unexpected expenses can benefit consumers and the broader economy. However, in the past, examples clearly exist where credit growth has exceeded sustainable levels and ended in a disruptive manner. To evaluate how consumers with credit scores in the lowest quartile are managing rising debt levels, Chart 6 shows the share of accounts held by this group that are current. The share current on all non-auto accounts has been steadily rising, suggesting these consumers are managing their debt levels well. However, the share current on auto loans has been declining over the past few years. These diverging trends suggest a subset of consumers are facing difficulties meeting their auto debt obligations.

**Chart 6: More accounts held by the lowest credit-score quartile are current, except for auto loans**



Sources: Equifax, Federal Reserve Bank of New York Consumer Credit Panel and National Bureau of Economic Research.

<sup>1</sup> This analysis excludes student loan borrowing, as we are unable to match student loan data with credit records.

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*\*Troy Davig is the senior vice president and director of research at the Federal Reserve Bank of Kansas City. William Xu is a research associate at the bank. The views expressed are those of the authors and do not necessarily reflect the positions of the Federal Reserve Bank of Kansas City or the Federal Reserve System. An earlier version was posted on July 15, 2016. The current version updates references to certain data sources.*