Consumer Credit Trends: Taking Stock of Where We Are

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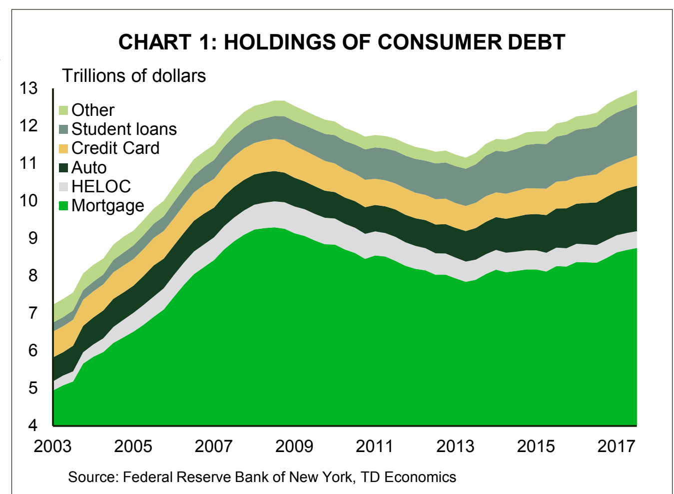
Highlights

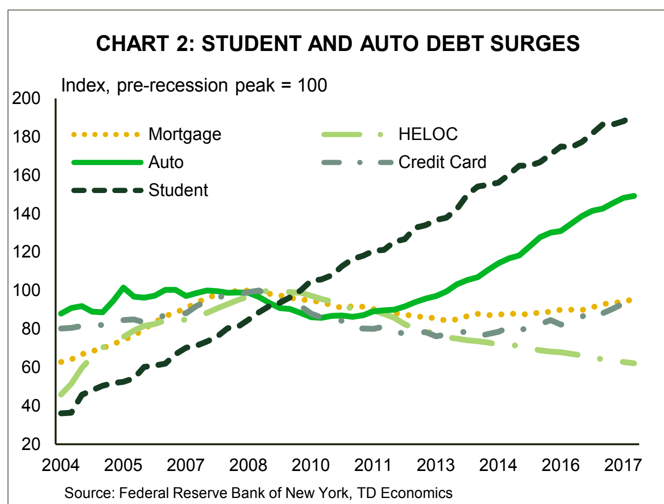
- The early stages of the economic recovery was characterized by a prolonged period of household deleveraging, however, more recent years have shown a renewed appetite for consumer credit. Household debt holdings now sit at 13 trillion dollars, or roughly 2% above peak levels reached prior to the subprime mortgage crisis.
- Credit growth has been led by non-housing related sectors, particularly student and auto loans. Expansion of non-housing related credit has been skewed toward lower credit quality borrowers, leading to increased leverage among low-income households.
- Rising delinquency rates across the credit card and autos segments have started to prompt some concern of another debt fueled crisis. This is unlikely. Debt holdings when measured as a share of household income or in per-capita terms remain well below pre-recession levels. Also, through tighter lending standards and higher loan premiums, it would appear that market forces are already working to correct risky lending.
- Delinquency rates also remain low by historical standards, implying the recent move higher has more to do with some mean reversion. Moreover, states that were disproportionately impacted by either the fallout in oil prices or hit by one of the devastating hurricanes last year have experienced the sharpest increase in delinquencies, suggesting one-off factors are partially to blame instead of a sudden deterioration in economy-wide credit quality.

There has been a lot of focus of late regarding the U.S. economy entering a more mature phase of the business cycle. From a credit perspective, these late-stage dynamics have historically been met with rising delinquency rates and a tightening in credit standards, which typically occur after a prolonged period of leveraging.

The current economic expansion is nearing the second longest in U.S. history, and also comes with the additional watermark of having occurred in a historically low interest rate environment. While the early stages of the economic recovery was characterized by a prolonged period of household deleveraging, recent years have shown a renewed appetite for consumer credit. According to data reported by the Federal Reserve Bank of New York, household debt holdings now sit at 13 trillion dollars, or roughly 2% above peak levels reached prior to the subprime mortgage crisis (see Chart 1).



On its own, this is not necessarily concerning, particularly given that debt holdings when measured as a share of income or in per-capita terms remain well below their respective pre-reces-



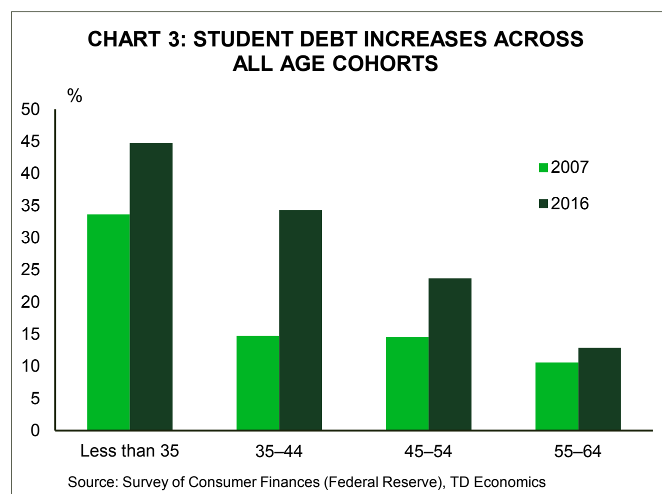
sion highs. However, the combination of low interest rates and a more protracted economic recovery have helped contribute to a greater concentration of debt issued to lower credit quality borrowers. This has been most apparent across the student, auto, and credit card segments. While delinquency rates on student debt have remained relatively stable, we have seen a gradual rise in auto and credit card delinquencies since early-2015, which have been met by a sharp tightening in underwriting standards.

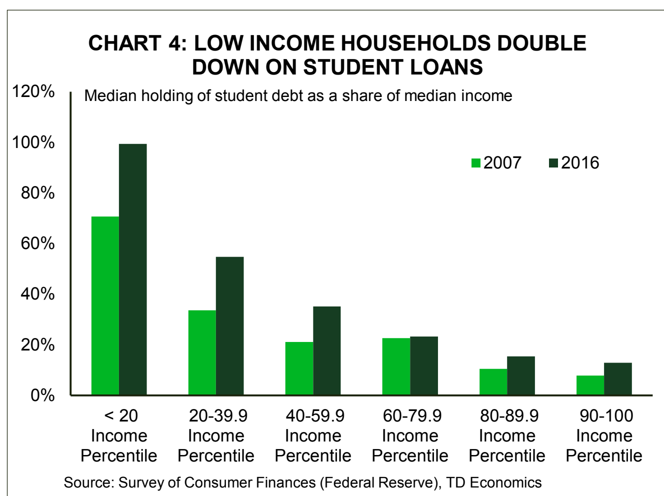
History would tell us that these are indeed tell-tale signs of late cycle dynamics, though it need not imply a recession is on the near horizon. Risks have risen, but they remain small and largely contained to a handful of states impacted by either the collapse in oil prices or by one of the devastating hurricanes last year. Outside of these states, it would appear that the more gradual increase in credit card and auto delinquencies can be attributed to mean reversion, as these delinquency rates are either just getting back to or still remain below pre-recession levels. With market forces already working to slow subprime lending and overall risks contained, it would appear that the current credit cycle still has some room to run.

Where Has the Growth Been Concentrated?

Throughout the current economic expansion, credit growth has been led by non-housing related sectors, and predominantly concentrated across two segments: student and auto debt (see Chart 2). Outstanding student loan balances now account for more than $1.2 trillion of household debt, second only to residential mortgages. The growth across the student loan segment becomes all the more apparent when shown as a relative share of household debt. In the early-2000s, student debt accounted for just 3% of aggregate debt holdings. Today that share has risen to over 10%. Interestingly, the increase in student debt has not been limited to just younger Americans, as all age cohorts have experienced an increase (see Chart 3). There are likely three main drivers of this trend: 1) people going back to school during and after the recession; 2) parents taking out more Parent PLUS[1] loans instead of using HELOCs as a source of finance following the collapse in home prices; and 3) rising cost of higher education which translates into higher debt balances and longer repayments. While there has been some deceleration in loan growth in recent years – largely due to a decline in post-secondary enrollment rates – growth in aggregate student loan holdings still averaged 4.5% in 2017.

Within the autos segment, loan growth was a bit slower to recover coming out of the recession. But, by early-2011, the combination of low interest rates, enticing incentives, and pent-up demand led to a surge in both vehicle sales and loan volumes. Since then, autos share of household debt has steadily increased and now accounts for over 9% of overall holdings – up from 6% in 2010. The remaining debt holdings are spread across credit and retail cards, mortgages, HELOC, and unsecured lines of credit. Across all four segments, debt holdings remain well below their respective pre-recession peaks and also account for less of the aggregate measure compared to a decade earlier.



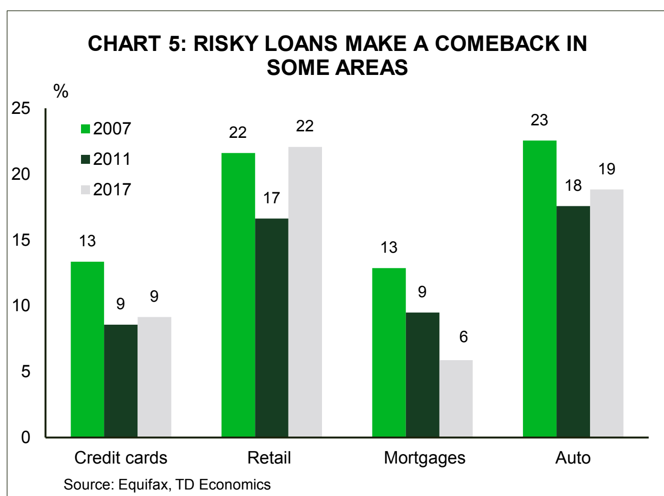


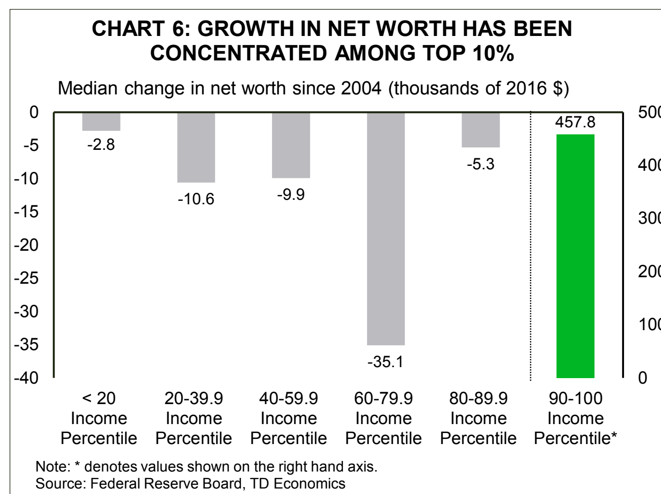
Leverage increases for low-income households

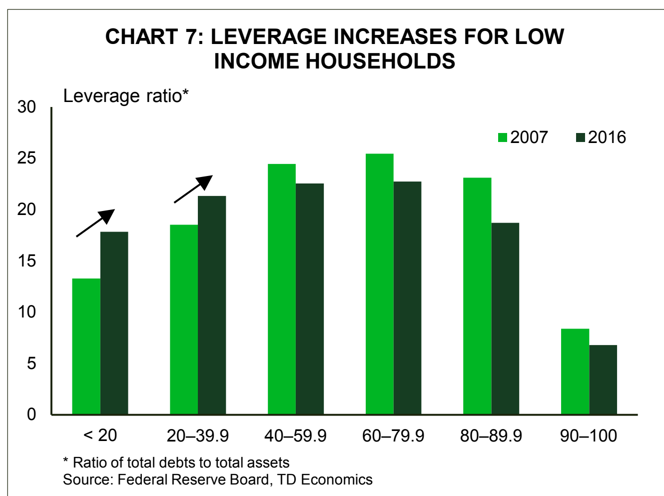
Re-leveraging has not been uniform across income groups. Higher income households appear to have de-leveraged during the recovery mainly through reduced holdings of mortgage-related debt, but also through a slower accumulation of debt across other categories. The opposite is true for lower income families. As a relative share, a record number of families in the bottom 40% of the income distribution are now holding some form of consumer debt. Digging deeper into the data shows that while these households have slightly reduced their dollar holdings of mortgage debt, they have significantly increased holdings of auto and student loans. In absolute terms, student debt has surged across all income groups. However, for low and middle income families, it has also dramatically increased as a relative share of their income (see Chart 4). A similar pattern exists for auto loans, whereby low income earners have experienced the sharpest increase when measured as a percentage increase or as a relative share of income.

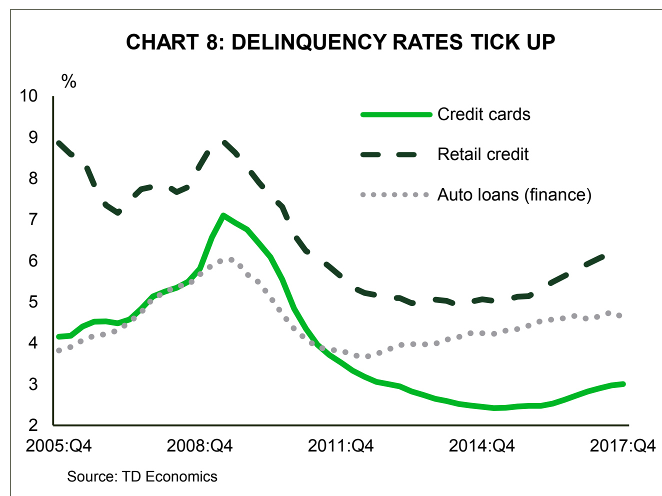
Increased lending to riskier borrowers is also apparent in the credit data. While subprime lending in the mortgage segment remains relatively insignificant, growth in subprime lending across other categories of consumer debt has been brisk (see Chart 5). Excluding housing-related borrowing, outstanding consumer loans (auto, student, credit and retail cards, and unsecured lines of credit) to subprime and near-prime borrowers grew by 57% since the trough, compared to the 46% increase for consumers with prime and super-prime credit scores. As a result, subprime loans have accounted for 42% of the growth in total lending since the post-crisis trough.

Income and wealth gains have also been uneven, further widening the gap in net worth across income groups. As of 2016, real median incomes among the 80-89.9 and 90-100 percentiles had regained all recessionary losses and now sit 2.1% and 10.7% above their respective pre-recession highs. Meanwhile, the median incomes of all other earners remain well below their respective pre-recession levels. High income earners also benefited disproportionally from the prolonged bull market run in global equities and recovery in home prices, since they are more likely to hold stocks and other forms of financial/non-financial assets. As a result, aggregate real household net worth is now more than 22% above its pre-recession peak, but essentially all of the gains have been concentrated among earners in the top 10% of the income distribution. According to data released through the Survey of Consumer Fi-









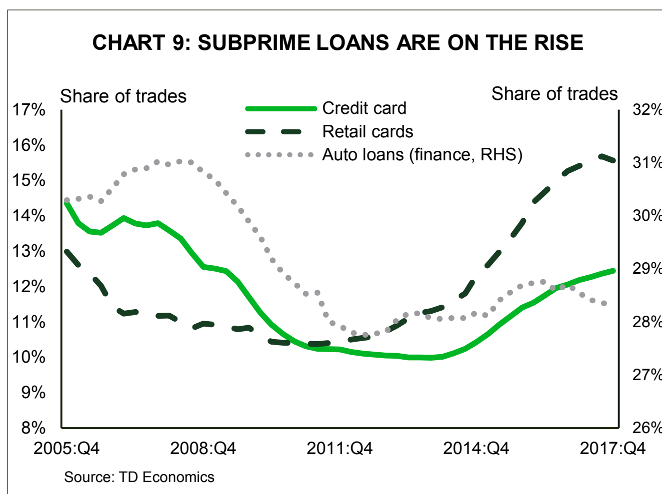
nances, real net worth for the top 10% has increased by more than 24% relative to its pre-recession peak. Meanwhile, net worth of the remaining 90% income earners still remains below their respective pre-recession highs (see Chart 6).

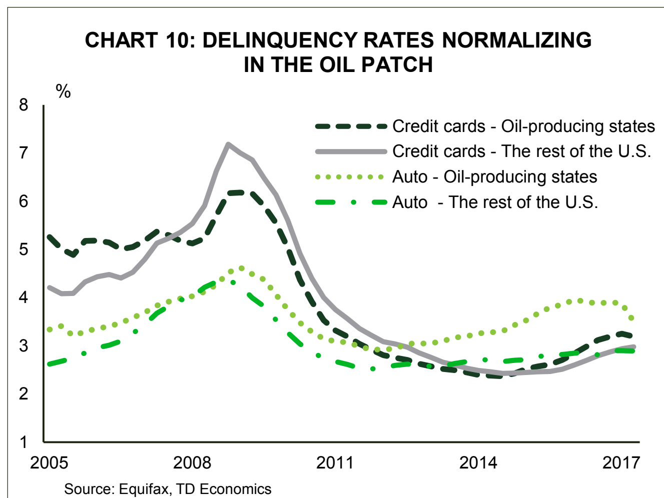
All in all, such divergent outcomes in terms of assets and debt accumulation across income groups have led to a substantial increase in low-income households' leverage ratio (the ratio of total debts to total assets) making them more vulnerable to future income shocks (see Chart 7).

Risks are rising in some spots

The extended period of low-interest rates have helped to keep debt servicing costs low, making it easier for households to keep up with their financial obligations. Improving labor market outcomes and rising incomes have also been key to keeping delinquency rates low. Nonetheless, some strain is beginning to show. While on aggregate delinquency rates remain quite low, they have increased noticeably for some categories of consumer debt such as credit and retail cards as well as autos (specifically those issued by finance companies). A rise in delinquency rates in these segments has been accompanied by a growing share of subprime loans (see Chart 9). Within the autos segment, debt payments for these borrowers have been made more manageable by amortizing the loans over a longer period of time. The average maturity of a new-car loan sits at 67 months, up by half a month compared to a year-ago. While this has certainly helped from an affordability standpoint, it has put a growing share of borrowers in a far more precarious position. A recent study[i] found that over a third of last year's vehicle trade-ins resulted in the borrower going into negative equity – a position whereby the purchaser owes more on the asset than its worth. This has been a direct by-product of longer loan terms, as borrowers trade-in a vehicle they still owe money on, and roll forward the remaining balance into the debt financing of the new vehicle.

In addition to the increase in risky lending, some of the uptick in delinquency rates can also be traced back to increased economic strain across oil producing states. Following the decline in oil prices in late 2014, delinquency rates on most consumer credit products moved considerably higher across oil producing states compared to the rest of the country (see Chart 10). Fortunately, the oil market has since stabilized and employment growth has returned, leading to an improved economic backdrop across this subset of states. Delinquency rates have since held steady or have started to edge lower, though they





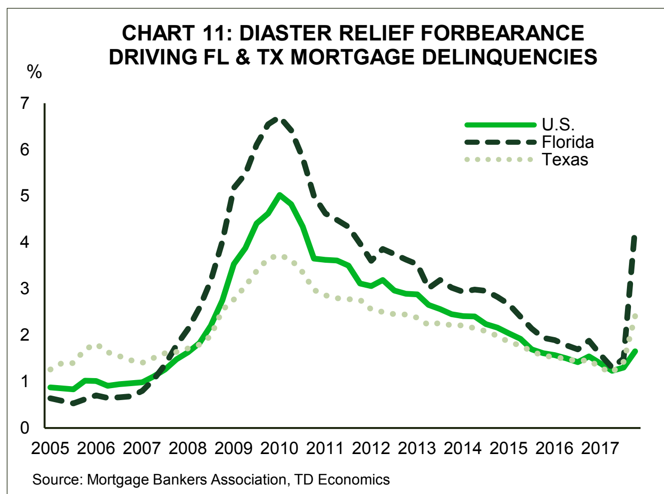
remain persistently above the national average (excluding oil states).

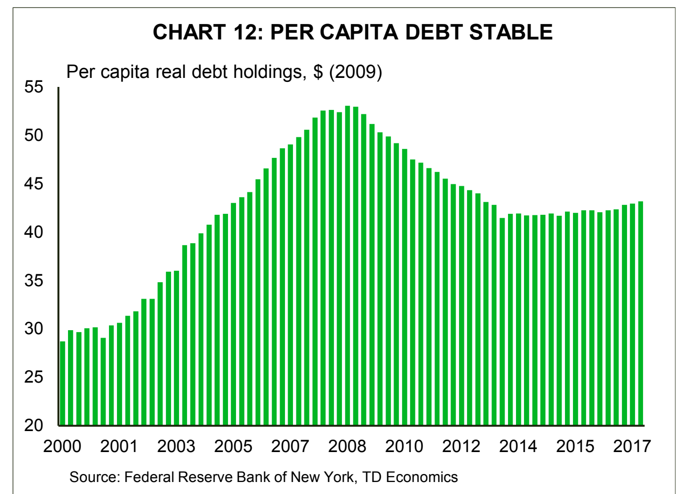
Other temporary factors stem from those states impacted by the devastating hurricanes of last summer. This is particularly true in Texas and Florida, where mortgage delinquencies have increased by 1pp and 3pp, respectively, in just the fourth quarter of last year (see Chart 11). Digging deeper into the construction of the data, however, shows that the Mortgage Banker Association's definition of "delinquent" includes both missed payments as well as loans that have gone into forbearance. Disaster relief forbearance is very common in areas directly affected by a natural disaster, and typically allows homeowner's to suspend or substantially reduce their mortgage payments for at least 90-days following the event. From that perspective, the increase in mortgage delinquency rates should not be interpreted as a sudden deterioration in credit quality, but rather the result of a large number of mortgage repayments having been temporarily suspended. With the initial disaster relief forbearance grace period having ended, we should see a reversion in mortgage delinquencies to pre-disaster levels over the coming quarters.

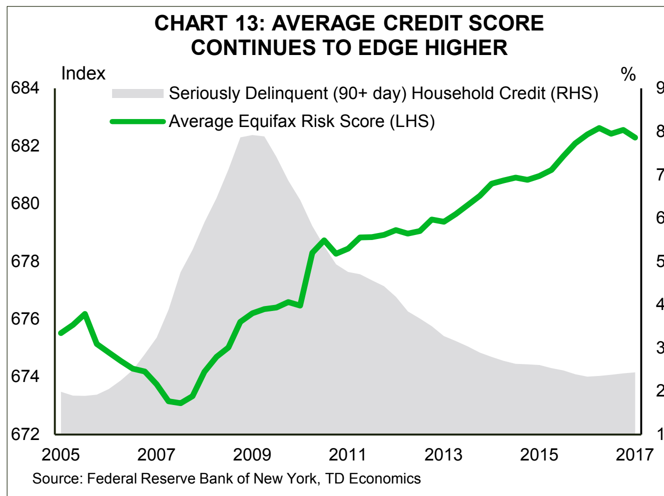
The other area prompting some concerns are student debt holdings. After spiking at the end of 2012 (NYFed data), delinquency rates have been holding steady at relatively high levels, however, the repayment rate continues to fall. This means that students not only have more debt (in absolute terms) today, but are also carrying it for longer. This has knock-on implications for consumption and is also leading to graduates having to postpone homeownership and other important life decisions. These impacts are all the more pronounced if the borrower defaults on their student loan, tarnishing the credit score.

But Debt-Led Crisis is Not Imminent

These developments certainly warrant attention, however, we do not foresee a household debt-led crisis in the near future. Even though the nominal measure of debt has surpassed its pre-recession peak, real debt holdings remain well below previous highs. Other relevant measures of household indebtedness, including debt-per-capita and debt-to-income ratios are also well below peak levels reached prior to the global financial crisis (see chart 12). And, even though a growing share of non-housing consumer debt has been of subprime





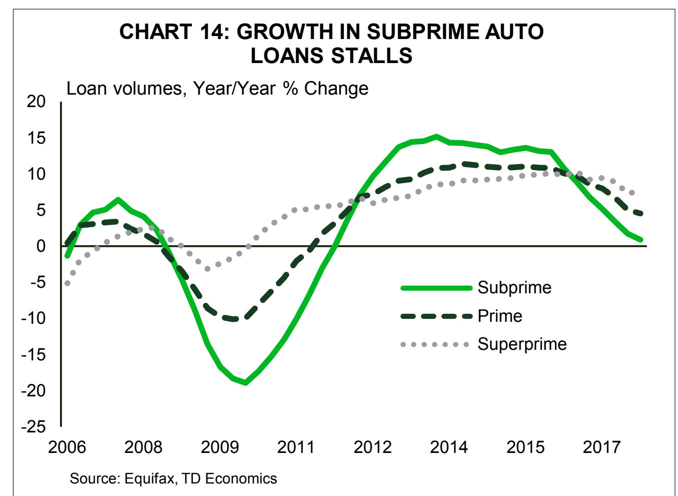


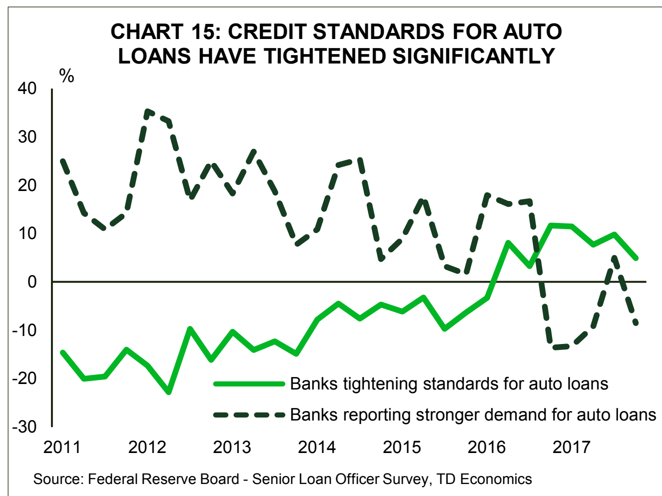
quality, one can make the argument that the post-recession vintages of debt are of a better quality than the subprime debt issued preceding the global financial crisis. Through policies of increased transparency of loan documentation to mandatory income and employment verification, lenders are now forced to adhere to stricter standards when doing borrower risk assessments. This has resulted in fewer households' becoming delinquent on debt obligations and has substantially reduced the number of bankruptcy filings. This has also manifested in improving overall credit scores, which now sit approximately 9 points above its recessionary low, according to data reported by Equifax (see Chart 13).

With the scars of the subprime mortgage crisis still fresh, rising delinquency rates have prompted lenders to pump the brakes on risky lending over the past year. This is especially evident across auto and credit card lending where subprime credit growth has slowed considerably (see Chart 14). Lending standards for both of these products have tightened significantly, while lenders have also widened lending spreads to compensate for riskier loans (see Chart 15). This was something not seen earlier in the recovery and given that its happening at a time when interest rates are also rising, should only help further temper the pace of subprime lending.

Higher interest rates alongside rising household incomes should also help from a repayment perspective. This is supported in the data, with debt repayment being positively correlated with both income and interest rates, though sensitivities vary depending on the borrowers' income and credit score. Empirical analysis shows that repayments of individuals who are of lower credit quality are far more sensitive to changes in income, but much less sensitive to changes in interest rates compared to higher credit quality borrowers. Moreover, for prime and super-prime borrowers, wealth effects (approximated by changes in home prices and the S&P500) also have a significant positive correlation with repayments, but are insignificant for subprime borrowers. Irrespective of the credit quality, the income effect is always stronger than the impact from changes in interest rates.

These income sensitivities were seen firsthand in 2016, following the collapse in oil prices. Employee compensation at the national level decelerated from nearly 5.5% in mid-2015 to just 1.1% by late-2016, as oil & gas and other supporting sectors shed thousands of jobs. The slowdown in income growth disproportionately impacted lower credit quality borrowers, with growth in aggregate subprime debt repayments, falling from 20% y/y in late-2015 to -30% y/y by mid-2016. Over the same time period, the charge-off rate for subprime consumer credit increased by over two percentage points to a peak of 28.5%. Meanwhile, debt repayment of higher credit qualities were far less impacted by the shock, with the respective charge-off rates for prime and super-prime consumer debt holdings increasing by 0.5pp and 0.2pp, respectively. This example demonstrates that individuals with lower credit scores are much more sensitive to negative income shocks. Assuming the income sensitivities are symmetric, a positive income shock, such as the one stemming from tax reform, should help to accelerate loan repayments over the coming months. However, should this assumption not hold, and lower credit quality borrowers use the tax





savings to increase leverage, it would only help further amplify existing default risk within the subprime space.

Last but not least, the risks from rising student debt to the broader financial sector are partially mitigated by the fact that the bulk of student debt is backed by the U.S. government, and tied to fixed interest rate loans. While there is no denying that the average student debt holdings have increased dramatically over the last decade, data shows that the majority of students hold a relatively small amount of debt. Borrowers with outstanding balances of more than $75,000 account for 8% of all borrowers with student debt[ii]. Moreover, government programs such as Pay-As-You-Earn (PAYE),[iii] which was launched in 2014, have been an important step in reducing future defaults. The program caps monthly payments to 10% of the borrowers' biweekly salary, and forgives any debt outstanding after a 20 or 25 year period (depending on the repayment steam). While this means that the loan is amortized over a longer period of time compared to a standard 10-year repayment cycle, PAYE increases loan affordability and better aligns repayments with graduate's lifetime income profile. Data shows that between 2014 and 2017 the number of borrowers in income-based repayment programs has more than doubled, and it now accounts for nearly half of all outstanding government issued student debt in repayment[iv]. Importantly, higher education continues to offer a good return on investment. While it is true that graduates with high levels of debt may have to postpone buying a house, their homeownership rate is still substantially higher than those without a degree, irrespective of their socioeconomic background[v].

As we have discussed in our recent report, while the U.S. economy is entering a more mature cycle, the current economic expansion still has plenty of runaway. Business cycles end when imbalances build up and rising interest rates expose vulnerabilities. Risks have increased in some sectors of household credit, but so far they remain small and insulated from the broader economy.

Bottom Line

U.S. households have shown a renewed appetite for consumer credit with household debt growing for 17 consecutive quarters. Growth in non-housing related categories of debt has been especially brisk and more recently has been accompanied by a rise in delinquency rates and tightening lending standards, which are typical signs of a maturing business cycle. However, this does not mean that the latest credit cycle has run its course. Some of the deterioration in credit reflects a return of delinquencies to historical trends from the low levels which prevailed during the earlier stages of the recovery. Furthermore, the uptick across some delinquency rates has been amplified by one-off regional factors, including increased economic strain in those states impacted by the 2014 collapse in oil prices or one of the devastating hurricanes last summer.

That's not to say that vulnerabilities do not exist. In particular, subprime lending within credit and retail cards as well as auto loans bears watching. Ditto for the increase in leverage among low-income households, which leaves them more sensitive to future negative income shocks.

Encouragingly, recent Equifax data suggest that lenders have been monitoring these risks and have pre-emptively begun to rein in loans to subprime borrowers. Moreover, given their size and current level of delinquencies, the risks to the broader economy stemming from these sectors remain relatively small and the potential for financial contagion is limited. Looking ahead, middle and higher-income households still have room to take on more debt while low-income households appear to be increasingly tapped out. That being said, the behavior of this group will be especially telling in the coming months as it remains to be seen if the savings from lower personal taxes will be used to pay off existing debt or to further increase leverage.

Footnotes

1. Parents of dependent undergraduate students can borrow under the Parent PLUS Loan program to help their children pay for college or career school.

Endnotes

i. https://www.bloomberg.com/news/articles/2018-01-25/underwater-on-your-trade-in-no-problem-u-s-car-lenders-say

ii. https://www.newyorkfed.org/medialibrary/media/press/PressBriefing-Household-Student-Debt-April32017.pdf

iii. https://obamawhitehouse.archives.gov/the-press-office/2011/10/25/we-cant-wait-obama-administration-lower-student-loan-payments-millions-b

iv. https://trends.collegeboard.org/sites/default/files/2017-trends-student-aid_0.pdf

v. http://libertystreeteconomics.newyorkfed.org/2017/04/diplomas-to-doorsteps-education-student-debt-and-homeownership.html

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