

The State of the Consumer

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Together we'll go far

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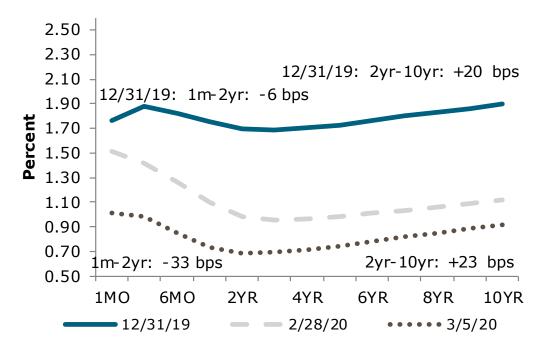
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The State of the Consumer – Coronavirus Could Expose Some Cracks

- Overall, consumer credit remains strong and stable, and underlying employment and wage growth seem to be in a good place so far.
- The unemployment rate ended 2019 at 3.5%, down from 3.9% in 2018 and 4.1% in 2017. It was previously in the 4% area during 2000, and the previous low point was 3.8% in April 2000.
- Changes in nonfarm payrolls and the unemployment rate seem to be the "go to" headline economic indicators for the consumer, in our view. While better employment figures are welcome, we believe the state of the consumer requires a fuller explanation.
- Sluggish economic growth over the past 10 years has created an uneven economic environment. By some measures, it appears that lower income households have not participated as much in the post-crisis recovery.
- Although headline macroeconomic numbers have been generally positive, a more detailed analysis indicates some areas of softness, in our opinion.
- In our view, a slowdown in economic and income growth due to the coronavirus could expose cracks within the consumer. Credit trends in consumer ABS are already imply a maturing consumer credit cycle, and uneven income growth has reduced the margin for error for many lower income, hourly and part-time workers in the event of an economic shock or policy mistake.
- In this report, we analyze a variety of economic indicators to provide a more complete view of the consumer sector as a framework for analyzing risks in consumer ABS.

Fed and Interest Rates Signal Caution

- Interest rates have reset lower and the swap yield curve inverted even more sharply after the coronavirus outbreak has expanded across the globe and weighed on the global GDP outlook.
- We believe there is information about growth prospects in the yield curve.
- Even with a 50-bp emergency rate cut by the Fed, the swap yield curve remains inverted -33 bps between one-month LIBOR and two-year swaps.
- The shape of the curve suggests that the market is expecting additional rate cuts by the Fed to get ahead of a potential slowdown in economic growth.

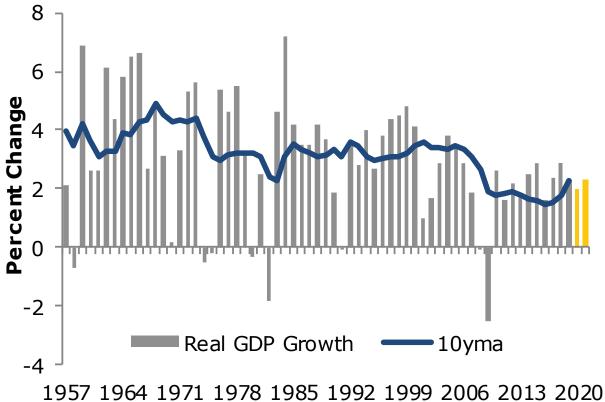


Source: Bloomberg, Wells Fargo Securities

The State of the Consumer

GDP Growth and Employment

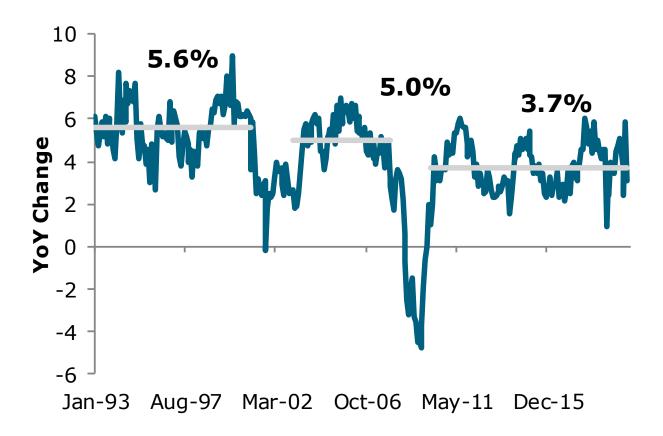
Real GDP Growth – Long Stretch of Subpar Growth and Sluggish Recovery



1937 1904 1971 1970 1903 1992 1999 2000 2013 2020

Source: Bureau of Economic Analysis, Wells Fargo Securities

- Long-run real GDP growth has been running about 2% compared to an average of 3+% prior to the Great Recession.
- While the 10-year moving average has increased the past two years, its due more to the recessionary period rolling out of the moving time frame rather than a meaningful increase in real GDP growth in recent years.
- Real GDP growth moderated in 2019 amid the China-U.S. trade war. With the global coronavirus outbreak, our WFS Economist believe risks are weighted towards a further slowdown in 2020.



Source: U.S. Census Bureau, Wells Fargo Securities

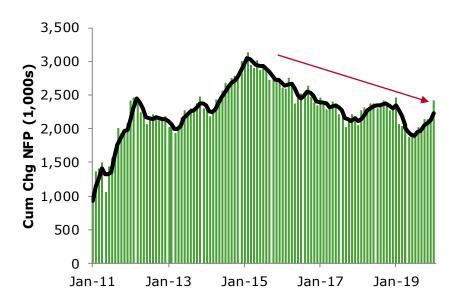
- Retail sales ex-food, autos, gas and building materials, also known as the retail sales control group, has experienced lackluster growth during the current economic recovery compared to previous cycles.
- Retail sales feeds into consumer spending, a primary driver of GDP growth.
- However, retail sales have averaged just 3.7% since 2010 compared to 5.6% from 1993-2000 and 5.0% from 2003-2007.

Unemployment Rate and Duration

12 45 40 40 35 Jo # 25 20 Mar-05 Apr-10 May-15

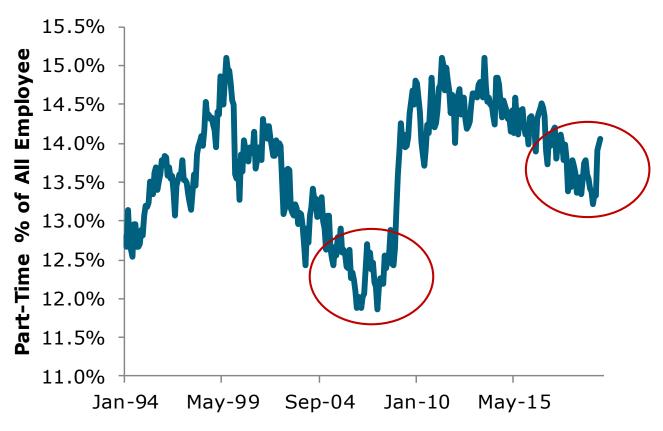
Source: Bureau of Labor Statistics, Wells Fargo Securities

Nonfarm Payroll Hiring – 12m Total



- The prosperity and spending habits of the consumer hinges in large part on their ability to find gainful employment, in our view.
- The headline unemployment rate has fallen to historically low levels; however, there is still a significant cohort of workers that have been unemployed for a long period of time compared to past cycles.
- The pace of hiring has slowed over the past few years as the labor market has tightened.
- Longer mean duration of unemployment may signify a structural shift in the economy, in our view. Longerterm unemployed workers may need re-training in new skill sets to find employment.

Employment – Part-Time Worker Share Elevated



- Another sign of a structural shift in employment can be observed in the increased percentage of part-time workers, which remains elevated at 14.1% as of February 2020.
- Part-time workers typically earn less per hour, work fewer hours each week and receive less access to benefits compared to their full-time counterparts.
- Furthermore, irregular hours and unpredictable work schedules for part-time workers can limit discretionary spending habits.

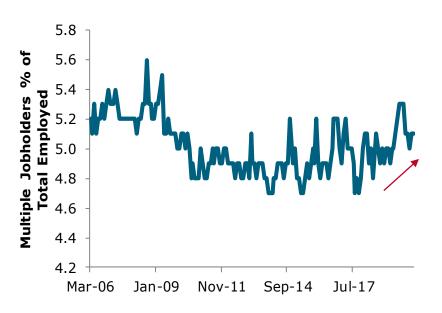
Employment – Fewer Hours Worked Results in Multiple Jobholders

Average Weekly Hours Worked

34.8 34.6 Average Weekly Hours 34.4 34.2 Worked 34.0 33.8 33.6 33.4 33.2 Mar-06 Jan-09 Nov-11 Sep-14 Jul-17

Source: Bureau of Labor Statistics, Wells Fargo Securities

Percent of Employed Holding Multiple Jobs



- Average weekly hours worked has slightly declined over the past year as economic activity has slowed.
- An increase in the employed population that holds multiple jobs has coincided with a decline in average weekly hours worked.
- For hourly workers who rely on consistent work schedules, some may have taken on multiple jobs to maintain income levels, in our view.

Employment – Openings and Hires, Quits and Layoffs



Job Openings Job Hires Job Hires Job Hires Job Hires Job Hires Dec-00 Mar-04 Jun-07 Sep-10 Dec-13 Mar-17

Job Quits vs. Layoffs

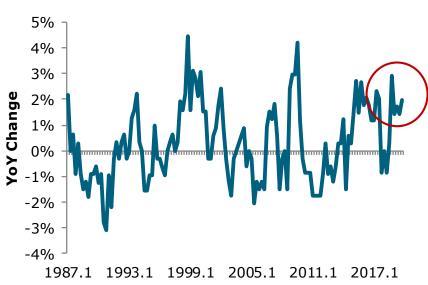


Source: Bureau of Labor Statistics, Wells Fargo Securities

- Job openings have declined over the past year possibly indicating a slowdown in future hiring expectations.
- New hires have lagged job openings suggesting that open positions have been difficult to fill either due to a tight labor market or a lack of skilled candidates.
- Positive signs include a low number of layoffs and an increase in the number of workers voluntarily quitting jobs.
- Voluntary quits are a positive sign that workers feel more confident about their job prospects beyond their current position and a move could potentially lead to better earnings.

2019 Breaks Out of Disappointing Long-Term Real Earnings Growth Pattern





Source: Bureau of Labor Statistics, Wells Fargo Securities

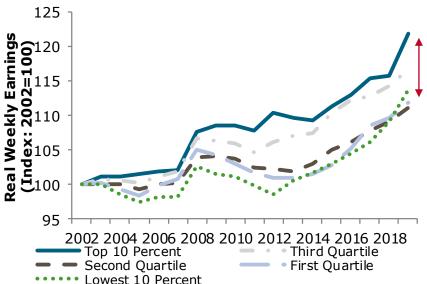
PCE Deflator 6% 5% 4% 2% 1% 0% -1% -2% 1987.1 1993.1 1999.1 2005.1 2011.1 2017.1

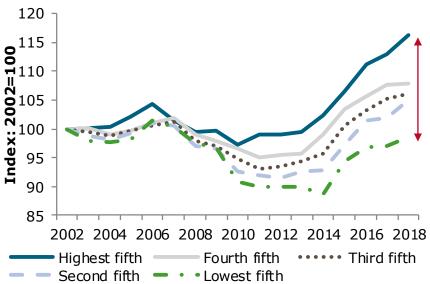
Source: Bureau of Economic Analysis, Wells Fargo Securities

- Median real earnings growth has been disappointingly slow, averaging just +0.3% YoY since 1987.
- Periods of above average real earnings growth seem to benefit from lower inflationary pressures as measured by the PCE Deflator.
- However, real earnings growth shot up in 2019 even as inflation rose toward 2%. This may be a sign that a tight labor market is putting upward pressure on wage growth.

Household Income and Wages – Differences Reflect Uneven Growth, Assets

Real Weekly Earnings by Quartile





Real Mean Household Income by Quintile

Source: Bureau of Labor Statistics, Wells Fargo Securities

Source: U.S. Census Bureau, Wells Fargo Securities

- An uneven economic recovery has led to disparate outcomes for real earnings growth depending on income level.
- Lower income households have been most affected by the recession based on job losses and structural unemployment. While wages have started to close some of the ground between higher earning households (real weekly earnings), it has taken years for real household income (including financial, nonwage income) to recover from the recession.
- In our opinion, slow income growth in lower income households may reflect long-term unemployment trends and a lack of wealth-creating financial assets.

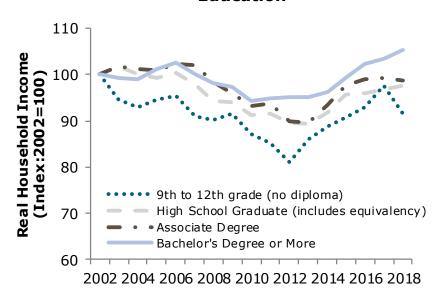
Uneven Economic Recovery – Educational Attainment Plays a Part

Unemployment Rate by Education

20 Less than High School High School Graduate Associates Degree Bacehlors Degree+ 18 % 16 **Unemployment Rate** 12 10 8 May-99 Aug-03 Nov-07 Feb-12 May-16

Source: Bureau of Labor Statistics, Wells Fargo Securities

Real Mean Household Income Growth by **Education**



Source: U.S. Census Bureau, Wells Fargo Securities

- Education also appears to be playing a part in the uneven job recovery and income growth.
- Households with high school or less education have experienced higher and more volatile unemployment rates, although income growth has caught up in recent years.
- Meanwhile, rising costs of higher education and underemployment may be holding back real income growth for the average college graduate.
- Mean household real income growth for an Associate and Bachelor's Degree graduate just recently returned back to 2002 levels.

Soft Consumer Data – Consumer Outlook Optimistic



Consumer Confidence

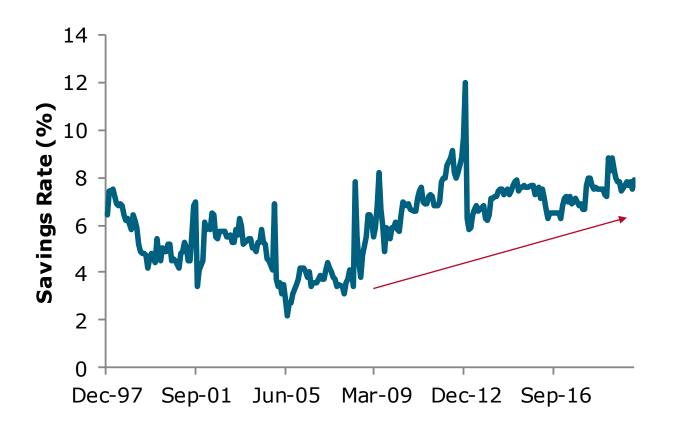


Source: Conference Board, Wells Fargo Securities

Source: Conference Board, Wells Fargo Securities

- Consumer confidence and expectations for income growth remain optimistic.
- A tight labor market and increasing income growth has bolstered consumer confidence and income
 expectations, which may enable an increase in consumer spending and borrowing.
- However, economic and financial uncertainty could lead consumers to change their outlook.

Household Saving Rate – Consumers Saving More



Source: Bureau of Economic Analysis, Wells Fargo Securities

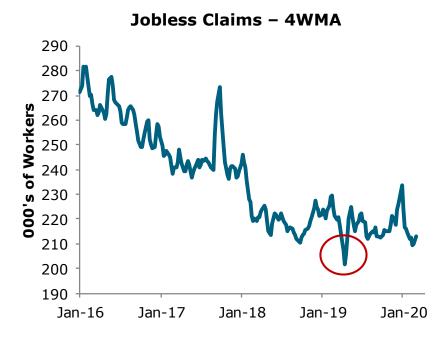
- The household savings rate as a percent of disposable income has remained relatively stable over the past few years, but elevated compared to pre-crisis averages.
- This indicates to us that, on average, consumers are being more prudent with spending and saving.

Jobless Claims - A Recession Indicator

Jobless Claims & Weeks to Recession

Recession Period	Previous Cycle Low	Week Ended	Weeks to Recession	Percent Increase From Low
Dec. 1969 - Nov. 1970	179.00	5/17/1969	28	15.5%
Nov. 1973 - Mar. 1975	221.00	2/17/1973	36	9.3%
Jan. 1980 - Jul. 1980	318.75	11/11/1978	59	35.3%
Jul. 1981 - Nov. 1982	404.25	4/18/1981	10	7.1%
Jul. 1990 - Mar. 1991	287.00	2/4/1989	73	25.8%
Mar. 2000 - Nov. 2001	266.25	4/15/2000	45	39.4%
Dec. 2007 - Jun. 2009	286.50	2/4/2006	94	17.3%
???	201.50	4/13/2019		
Average			49	21.4%
Median			45	17.3%

Source: Labor Department, Federal Reserve Bank of St. Louis, Wells Fargo Securities



Source: Dept. of Labor, FRB St. Louis, Wells Fargo Securities

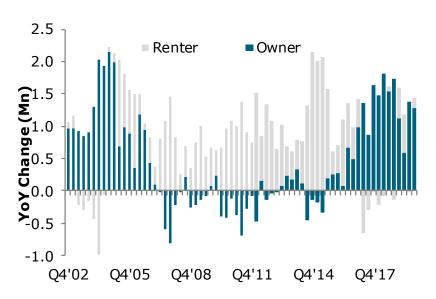
- Jobless claims on a four-week moving average basis have been a useful indicator from the real economy of economic cycles.
- We measured the time in weeks to recession from the prior absolute low point. The average and median are close to one year from the low, but the range of outcomes makes a precise forecast difficult.
- The most recent low was 201,500 in April 2019. Based on the timing of previous cycles, the next recession could begin sometime between March 2020 and February 2021.

The State of the Consumer

Gauging Consumer Expenses

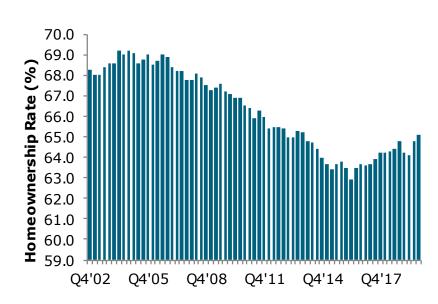
Consumer Expenses – A Rotation Toward Homeownership

Renter/Owner Household Formation



Source: U.S. Census Bureau, Wells Fargo Securities

US Homeownership Rate



Source: U.S. Census Bureau, Wells Fargo Securities

- A strengthening economy has helped drive a more robust pace of household formations. New household formation has included a rotation to homeowners from renters.
- Meanwhile, a lack of supply to meet this demand will remain a key driver for the housing market in 2020 and should provide some support for home prices.

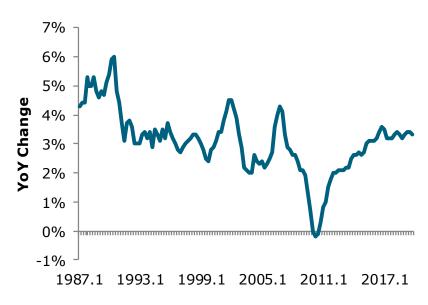
Consumer Expenses – House Prices Rising Rapidly in Some Markets

FHFA Housing Prices

San Fran Chicago Dallas 500 450 350 300 200 150 2000.12003.12006.12009.12012.12015.12018.1

Source: FHFA, Wells Fargo Securities

CPI Owners Equivalent Rent Growth



- On the expense side of the ledger, housing-related costs have been rising in many markets across the country over the past few years. Housing cost trends may look meaningfully different in different markets.
- Prices in San Francisco have accelerated in the past seven years, and exceed pre-crisis highs. Other markets, like Chicago, have lagged and remain at levels below the peak.
- The cost of renting has increased with other housing costs, and is currently above pre-crisis growth rates.

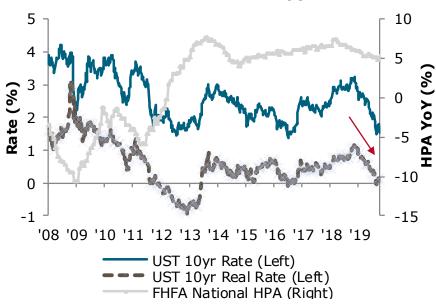
Consumer Expenses – Lower Rates Help Housing Affordability

Home Affordability vs. Median Income



Source: Freddie Mac, CoStar, National Association of Realtors, Wells Fargo Securities

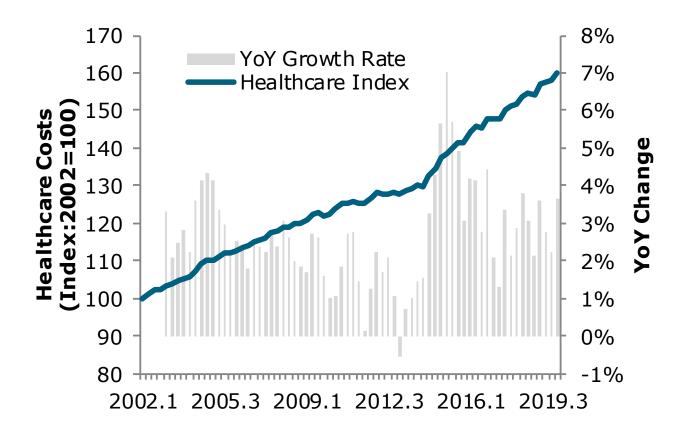
Rates vs. Home Price Appreciation



Source: FHFA, Bloomberg, Wells Fargo Securities

- Housing affordability was becoming challenged as rents and mortgage payments had steadily risen since
 2011, matching the trajectory in median household income.
- However, a decline in mortgage rates since 2018 has meant mortgage payments are becoming more favorable as opposed to renting.
- Home price appreciation remains steady and, overall, housing-related costs have grown at an increasing rate, which is part of the pressure on consumer real income growth.

Consumer Expenses Rising – Health Care Costs Elevated



Source: Bureau of Economic Analysis, Wells Fargo Securities

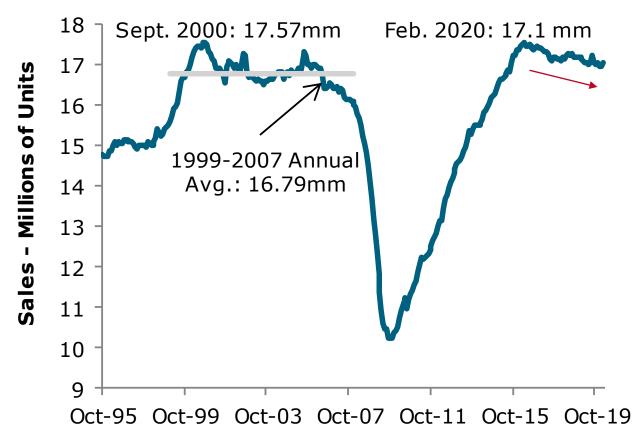
- Health care expenses have risen significantly over the past few years, growing at a 3.1% compound annual growth rate since 2014.
- Rising health care expenses may be offsetting some of the consumer savings elsewhere, such as gasoline.

Lower Gasoline Prices Benefiting the Consumer



Source: U.S. Dept. of Energy, Wells Fargo Securities

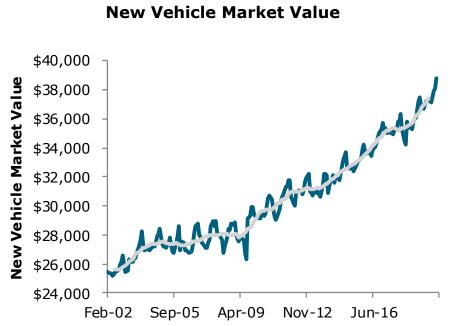
- Retail gas prices have fallen to \$2.55/gallon on average since the beginning of 2015 from an average of \$3.57/gallon from 2011 to 2014.
- We estimate the gas savings to be about \$600-\$800/year per vehicle based on these average prices.
- These gas savings should provide some benefit to household budgets, in our view.



Source: Bureau of Economic Analysis, Bloomberg, Wells Fargo Securities

- New auto sales have drifted lower to the 17.1 million unit area on a rolling 12-month basis, but still above the pre-recession average of 16.8 million units.
- Pent-up consumer demand for new vehicles to replace an aging fleet has led to higher volumes. Sales have been supported more recently by incentives from auto makers and a reliance on leasing.
- Barring a serious economic setback, we believe auto sales are likely to remain robust, but will migrate down toward long-run averages.

Consumer Expenses Rising – Rising Vehicle Costs Offset by Longer Loan Terms



Source: Edmunds, Wells Fargo Securities

Avg. New Vehicle Loan Term

Source: Federal Reserve Board, Wells Fargo Securities

Jan-96

Jan-02

Jan-08

- Strong demand for new vehicles has led to rising transportation costs overall.
- However, loan terms have been extended to provide additional affordability as income growth has trailed. The average term of a new vehicle loan at finance companies was 67 months as of Q4 2019.

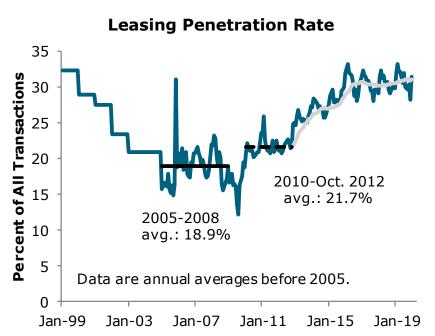
48

Jan-90

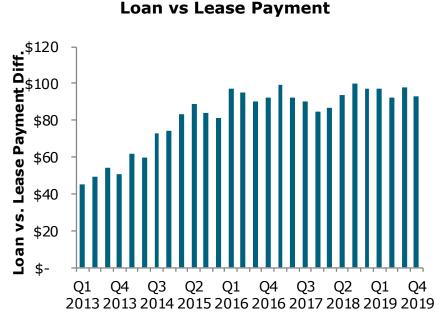
Lower interest rates have also helped contain household transportation costs.

Jan-14

Consumer Expenses Rising – Leasing An Affordability Solution



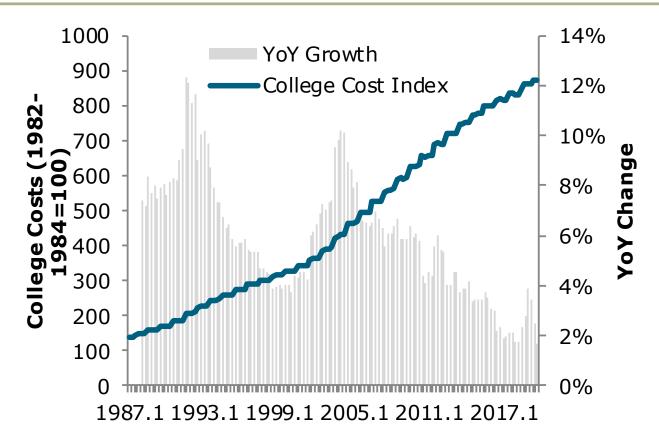
Source: CNW Marketing, Edmunds, Bloomberg, Wells Fargo Securities



Source: Experian, Wells Fargo Securities

- Leasing has become an important affordability option for many car buyers.
- Consumers can save nearly \$100 on their monthly payment by choosing to lease a new vehicle rather than purchase it with a loan.
- Leasing has become an important consumer relationship tool for dealers, as well, and lease penetration rates remain near all-time highs.

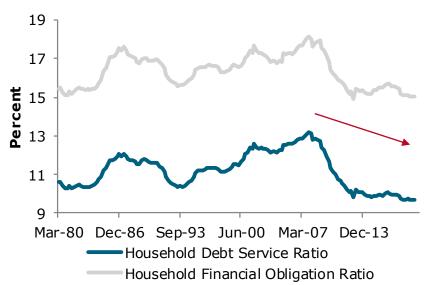
Consumer Expenses Rising – College Tuition Costs Continue to Rise



- College tuition and fees accelerated in 2001 when states began cutting back on funding in state budgets for higher education.
- Growth rates have slowed in recent years as some colleges have focused on cutting costs and capping annual tuition increases. Nevertheless, the trend in costs remains higher, helping to increase student borrowing.

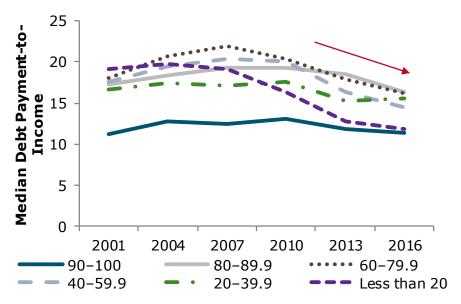
Consumer Debt Service and Financial Obligation Ratios Historically Low

Consumer Debt Service and Financial Obligation Ratio



Source: Federal Reserve Board

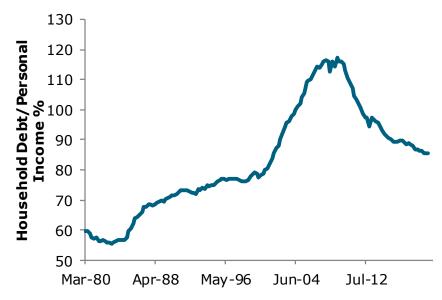
Debt Service Ratio by Income Percentile



Source: Federal Reserve Board, Wells Fargo Securities

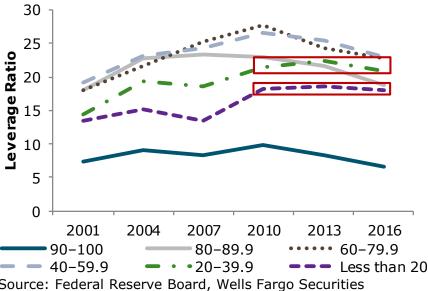
- Modest income growth and low interest rates have reduced consumer debt service and financial obligation ratios to historic lows.
- All household income cohorts have experienced a reduction in their debt service ratio, but some cohorts have benefited more than others.
- This measure suggests that consumers have the capacity to borrow more than they are currently.

Household Debt-to-Income Ratio



Source: Federal Reserve Board

Household Debt-to-Asset Leverage Ratio by Income Percentile

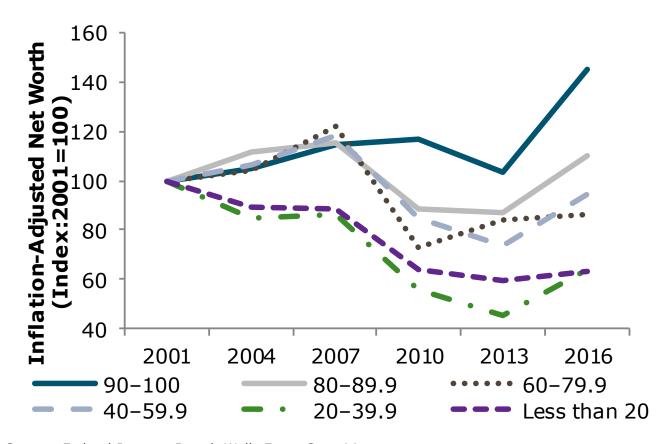


Source: Federal Reserve Board, Wells Fargo Securities

- Consumer debt-to-income leverage appears to have stabilized. Overall, leverage remains high on a historical basis.
- Debt-to-asset leverage ratios for lower income households have not experienced as much post-crisis improvement.
- In our opinion, debt may be filling the gap for many households when incomes have not kept pace with rising living expenses.
- We believe high levels of leverage along with slow income growth are generally keeping many consumers cautious with regard to incremental borrowing.

The State of the Consumer

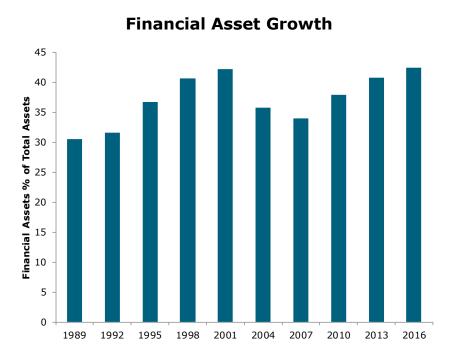
Household Wealth and Assets



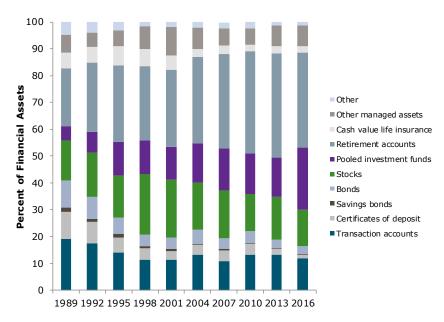
Source: Federal Reserve Board, Wells Fargo Securities

- Variation in the growth of net wealth has contributed to the different outcomes in household debt-to-asset leverage.
- While disparate net wealth trends were already in place before the last recession, many lower income households suffered greater wealth declines. Only recently have these households started to generate positive net wealth growth.
- Nevertheless, many of these households are still worth less today than they were 15 years ago.

What's Driving Net Wealth?



Distribution of Financial Assets

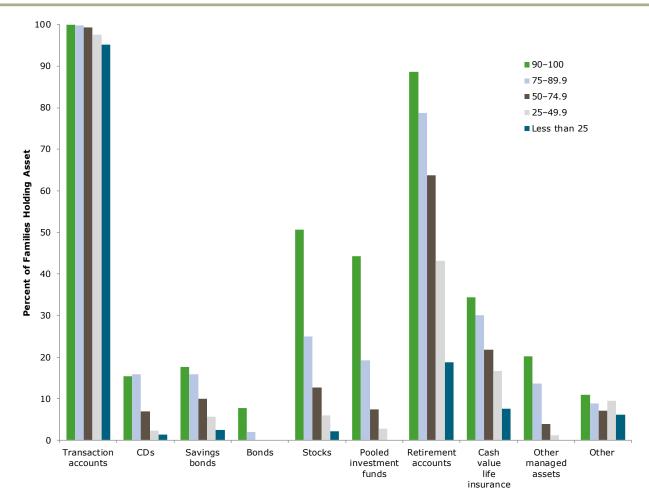


Source: Federal Reserve Board, Wells Fargo Securities

Source: Federal Reserve Board, Wells Fargo Securities

- The greatest contributor to the rise in net wealth has come from an increase in financial assets. Financial assets made up 42.5% of all household assets in 2016, equaling the high-water mark set in 2001.
- Within financial assets, retirement accounts, pooled investment funds and stocks make up the top three household holdings.
- Rising asset valuations has contributed to increasing net wealth. For context, the S&P 500's total return from 2007 to 2019 has been approximately 200% including dividend reinvestments.

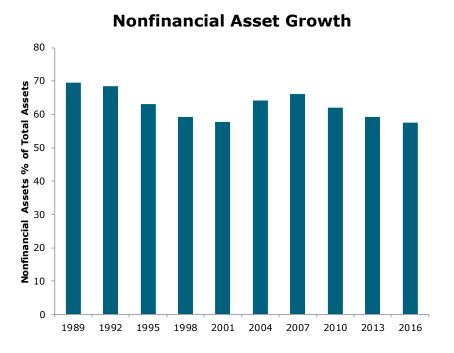
Rising Asset Values Help, but Only If You Hold Them



Source: Federal Reserve Board, Wells Fargo Securities

- Rising asset valuations help generate net wealth. However, it only helps if you have them.
- A breakout of financial asset holding by net worth percentile indicates that a significant percentage of lower net worth households don't hold retirement accounts, pooled investment funds or stocks.
- A large segment of the population has not benefited from rising financial asset prices.

Nonfinancial Assets Declining, but Still Largest Household Asset



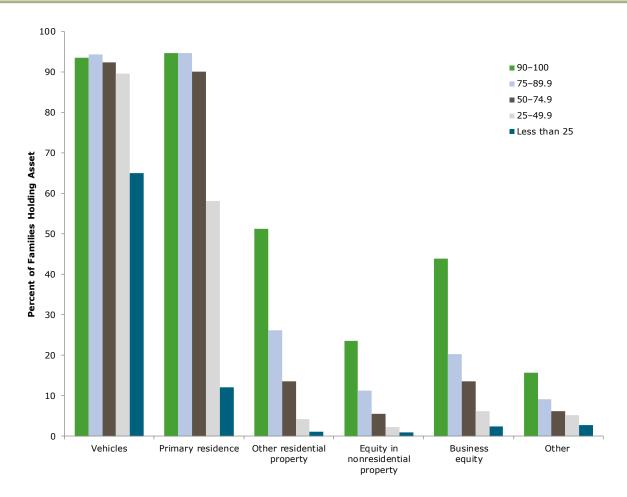
Source: Federal Reserve Board, Wells Fargo Securities

Source: Federal Reserve Board, Wells Fargo Securities

1989 1992 1995 1998 2001 2004 2007 2010 2013 2016

- Nonfinancial assets still make up greatest percentage of household assets. Generally, a home is the largest asset most households will hold.
- However, this has been declining over the years as many households lost their homes in the recession and homeownership rates have not recovered.
- Meanwhile, business equity has steadily grown as closely-held business profits have benefited from slow, but positive, economic growth.

Rising Asset Values Help, but Only If You Hold Them - Part 2



Source: Federal Reserve Board, Wells Fargo Securities

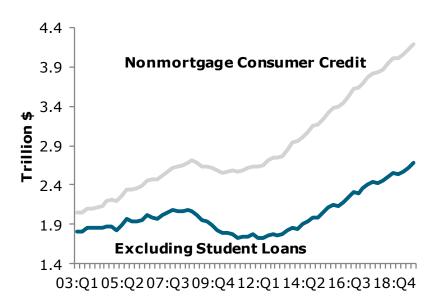
- Rising home prices and business profits should benefit consumer net wealth. Again, rising asset prices help, but only if you hold them.
- The lowest net worth households typically don't own a home or their own business. Therefore, they haven't benefited as much from the increase of nonfinancial asset prices.

The State of the Consumer

Consumer Debt Trends

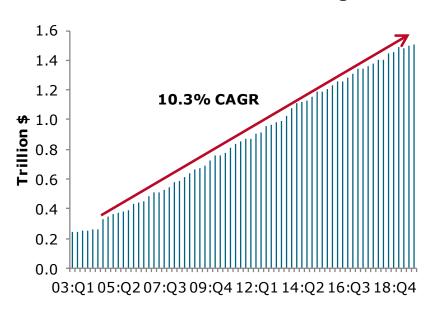
Nonmortgage Consumer Debt - Led by Student Loans, Auto Debt

Nonmortgage Consumer Debt



Source: Federal Reserve Board of New York, Wells Fargo Securities

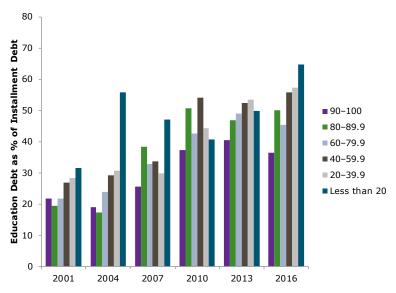
Student Loans Outstanding



- Nonmortgage consumer debt has grown rapidly mainly due to growth in student loans and auto finance.
- Excluding student loan debt, nonmortgage consumer debt has increased at a more modest 2.4% CAGR pace to \$2.7 trillion as of Q4 2019 from the pre-crisis peak of \$2.1 trillion in Q4 2008.
- In our opinion, higher levels of student loan debt may be crowding out consumer demand for other types of debt.

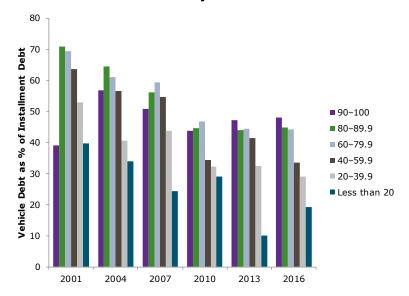
Education Debt Contributing to Higher Leverage Ratios

Education Debt as % of Nonmortgage Installment Debt by Income Percentile



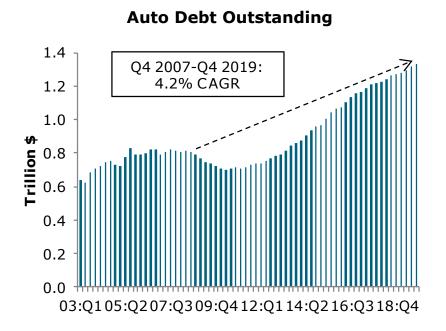
Source: Federal Reserve Board, Wells Fargo Securities

Vehicle Debt as % of Nonmortgage Installment Debt by Income Percentile

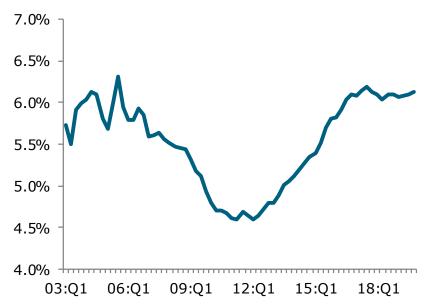


- One of the faster growing debt types has been installment debt, which growth has mainly come through education and vehicle debt.
- Education debt tends to be significantly more burdensome for lower income households. As of 2016, education debt represented over half of all consumer installment debt for a majority of households.
- We believe the rise in education debt has likely crowded out consumer demand for other types of debt.

Auto Debt Expands with the Economy



Auto Debt % of Nominal GDP



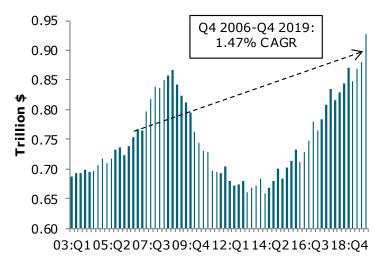
Source: FRBNY, Bureau of Eco. Analysis, Wells Fargo Securities

Source: FRBNY, Wells Fargo Securities

- Auto finance debt has expanded well above pre-crisis levels, at a compound annual growth rate of 4.2% since 2007. However, it is only slightly ahead of the expansion in nominal GDP.
- As a percentage of nominal GDP, auto credit outstanding has normalized, and remains near pre-crisis levels.
- Although some observers worry about auto credit, the data on credit trends point to few excesses in underwriting.

Credit Card Loan Growth Has Been Slow

Credit Card Debt Outstanding



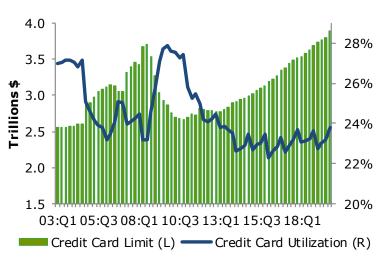
Source: FRBNY, Wells Fargo Securities

Credit Card Debt % of Nominal GDP



Source: FRBNY, Wells Fargo Securities

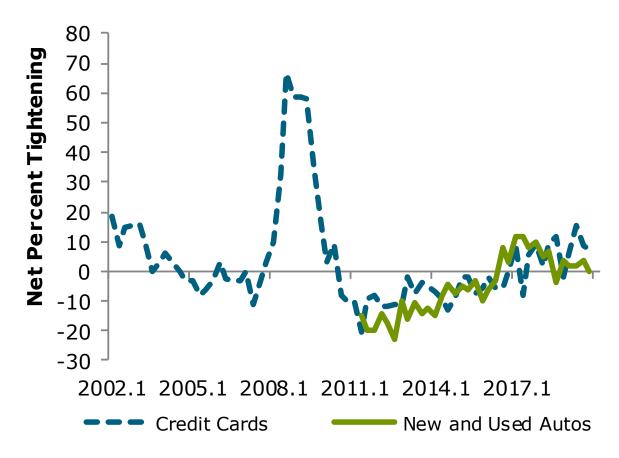
Credit Card Utilization



Source: FRBNY, Wells Fargo Securities

- Credit card lending has been slow to recover postcrisis, with the ratio of credit card debt to nominal GDP stuck around 4% since 2013.
- An easing of lending standards has led to credit card accounts and limits growing. However, credit utilization rates have been stable.
- In our opinion, lower utilization rates suggest that consumers may view credit cards more as a convenient payment option and less as an extension of credit.

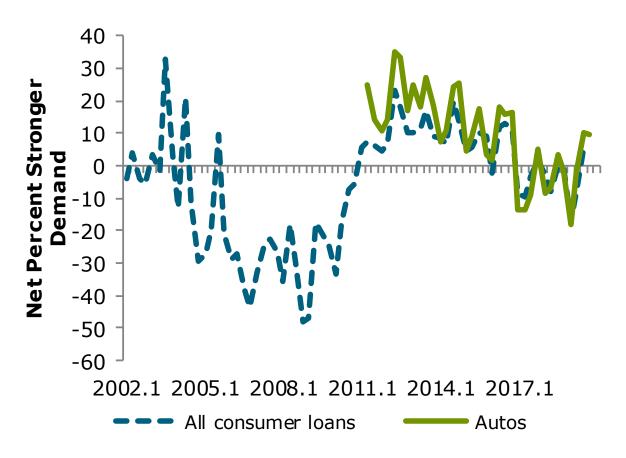
Tightening in Credit Standards – Senior Loan Officer Survey



Source: Federal Reserve Board, Wells Fargo Securities

- After several years of easing credit availability, lending standards appear to have tightened somewhat.
- Increases in loss rates in early 2016 in autos and early 2017 in credit cards may have influenced changes in loan underwriting.

Consumer Credit Demand Picking Up – Senior Loan Officer Survey

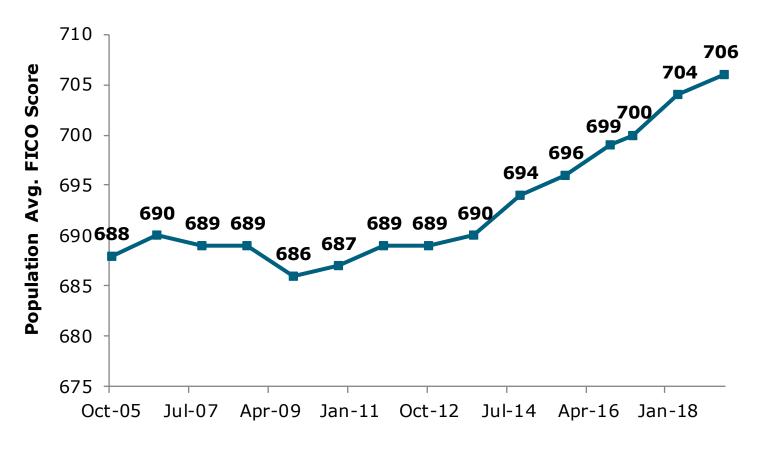


- As credit availability has tightened, consumer credit demand has also declined. Demand for credit had been led by auto loans, as new vehicle prices have increased faster than income growth.
- However, demand for credit has picked back up in recent quarters as better income growth may have helped consumers feel more comfortable taking on additional debt.

The State of the Consumer

Consumer Credit Performance Trends

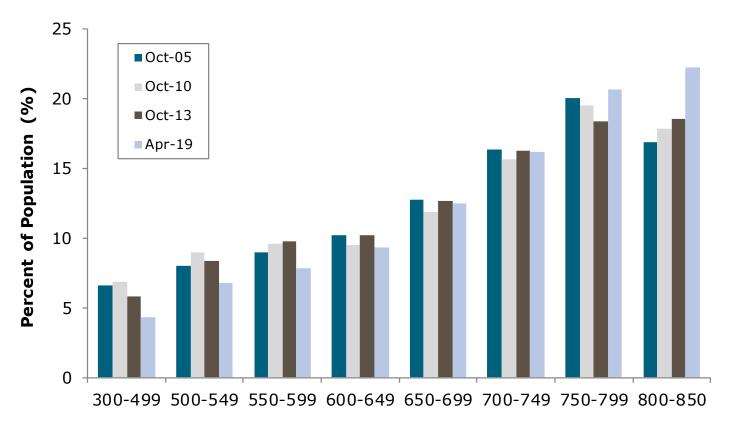
Consumer Credit Scores Rising



Source: Fair Isaac, Wells Fargo Securities

- Average FICO scores have increased coming out of the mortgage crisis. Past delinquency and bankruptcy
 events have been rolling off of consumers' payment histories. Prime borrowers that did not experience
 financial problems have strengthened their financial positions.
- A FICO methodology change in 2014 with regard to unpaid medical debt appears to have boosted scores above trend on average.

Distribution of Consumer Credit Scores

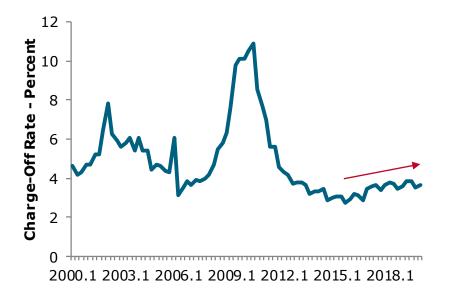


Source: Fair Isaac, Wells Fargo Securities

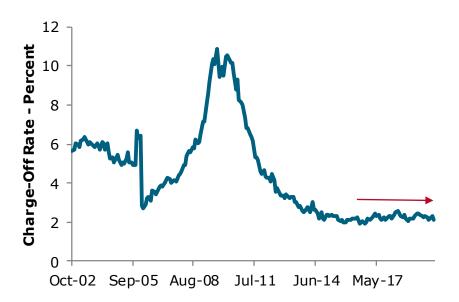
- Subprime borrowers make up approximately 30% 35% of all borrowers with credit scores.
- The distribution of credit scores has shifted somewhat over time. The cohorts with the lowest scores have declined since the recession, and the top end has generally increased.

Credit Card ABS – Seasoned Accounts, Stable Performance

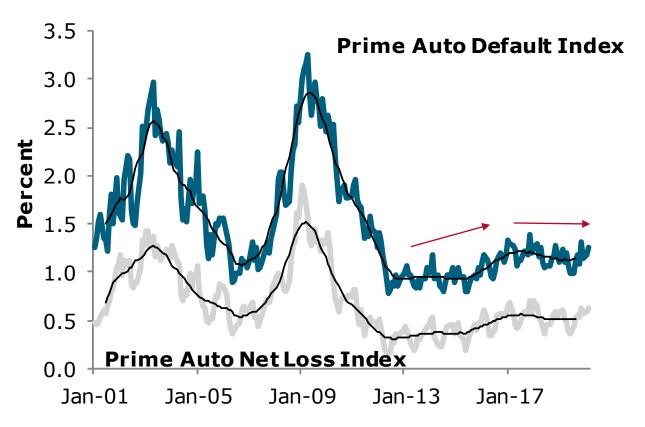
Credit Card Charge-Offs - Banking System



Credit Card ABS Charge-Offs



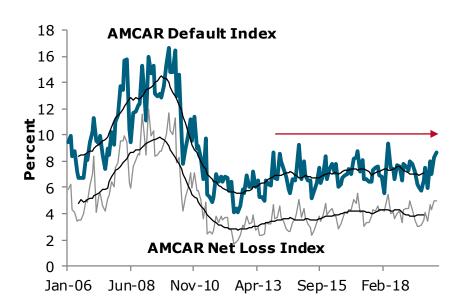
- Source: Intex, Wells Fargo Securities
- Credit card fundamentals remain sound as charge-off rates are near all-time low levels.
- Credit card ABS may not be as strong of a leading indicator as in the past, since outstanding credit card ABS trusts have experienced positive selection bias after the recession.
- More-seasoned and higher-quality borrowers remain in the trusts after lower-quality borrowers defaulted during the recession and exited from credit card ABS trusts.
- The modest up-tick in credit card charge-off rates experienced in the banking system is not showing up in the ABS trust data.



- Prime auto ABS default and net loss rates rose slowly from low levels after the tight underwriting of the recession period. Auto loss rates appear to have stabilized over the past couple years.
- This represents to a large degree a normalization of credit conditions after years of above-average performance.
- Prime auto ABS credit trends have been exceptionally strong in the post-crisis period, in our opinion.

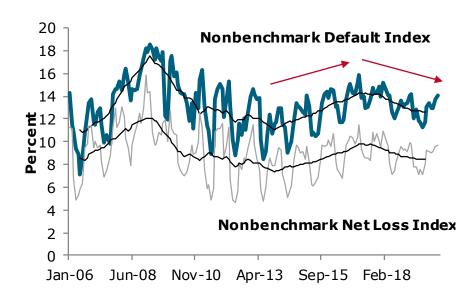
Subprime Auto ABS – Performance Stable, but Idiosyncratic Difficulties Emerge

AMCAR Default and Net Loss Indexes



Source: Intex, Wells Fargo Securities

Nonbenchmark Default and Net Loss Indexes



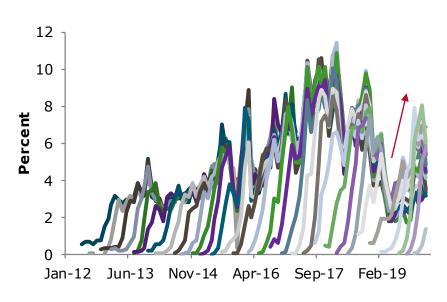
- Benchmark issuers, such as AMCAR and SDART, have displayed fairly stable credit performance throughout the post-crisis period.
- After default and net loss rates rose in some nonbenchmark issuers in 2015 and 2016, performance has improved as lenders tightening underwriting standards and solid income growth, especially for lower income households, have helped to support auto loan performance.
- However, we are seeing signs of rising extension and delinquencies again in some subprime auto loan pools as idiosyncratic difficulties are emerging.

Subprime Auto ABS – More Extension Rates Given to Delinquent Borrowers

Nonbenchmark 60+ Delq as % of Orig. Balance

4.5 60+ Delq % of Orig. Balance 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 10 13 16 19 22 25 28 31 34 37 40 43 46 2019 2018 • • 2017 2016 ••••• 2015

CPS Extension Rates

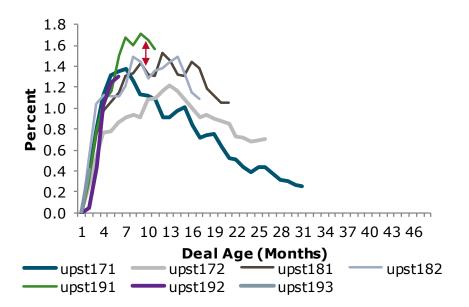


Source: Intex, Wells Fargo Securities

- An extension is a modification to the original loan term that may be offered to a delinquent borrower experiencing a temporary financial setback. Extensions can be a valuable servicing option, but failed extensions have the effect of delaying the recognition of charge-offs and losses.
- Despite an increase in extensions, 60+ day delinquencies are also rising later in the life of a deal, which indicates there may be more back-loaded losses yet to be realized.
- An increase in extension and delinquency rates indicates some additional weakness among borrowers, in our view.

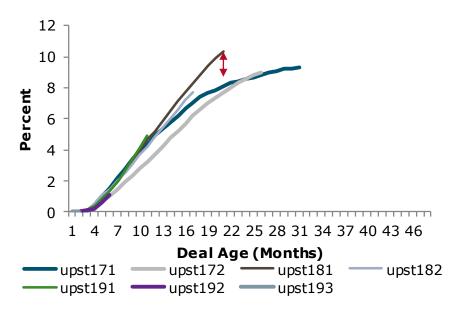
Personal Loan ABS – Delinquency and Loss Rates Rise

UPST 60+ Delq as % of Orig. Balance



Source: Intex, Wells Fargo Securities

UPST Cumulative Net Loss



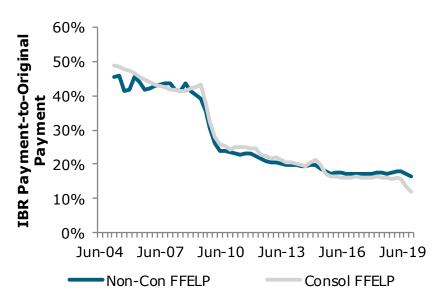
- There are also some signs of consumer credit weakness in the personal loan ABS market.
- In our view, a portion of credit card revolvers have moved to the personal loan market for longer-term credit borrowing needs.
- Some newer, marketplace personal loan lenders, such as Upstart (UPST), are experiencing elevated 60+ day delinquencies and cumulative net loss rates compared to prior vintages and deals as originations have risen and credit has expanded.

FFELP Student Loan –Income-Based Repayment Becomes More Prevalent

SLMA/NAVSL IBR Pool Percentage

30% 25% - 20% - 15% - 10% - 5% - 0% - Jun-04 Jun-07 Jun-10 Jun-13 Jun-16 Jun-19 - Non-Con FFELP Consol FFELP

IBR Payment-to-Original Payment



Source: Intex, Wells Fargo Securities Source: Intex, Wells Fargo Securities

- Student loan credit performance has been an notable area of weakness in the consumer sector.
- Earnings have not kept up with student loan debt growth rates causing student loan borrowers to have difficulties making payments.
- As a result, income-based repayment (IBR) plans, which cap monthly payments and create student loan forgiveness eligibility, have been opened to and adopted by more student loan borrowers.

DISCLOSURE APPENDIX

Additional information is available on request.

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