

OBSERVATION

TD Economics



June 15, 2015

AUTO LENDING: CAUSE FOR CONCERN?

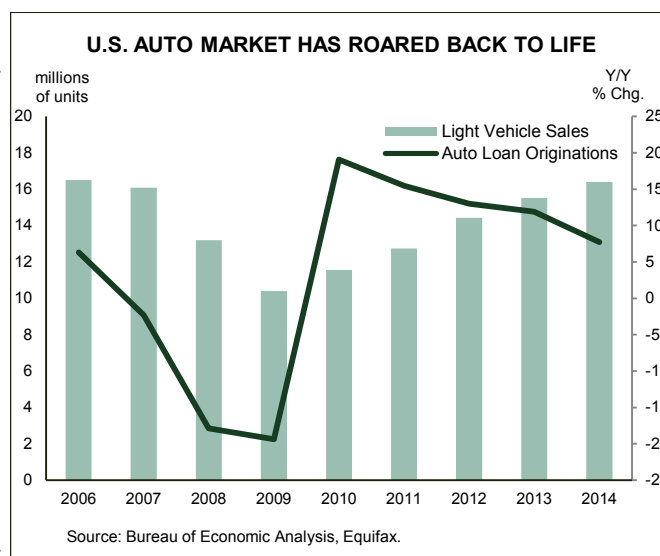
Highlights

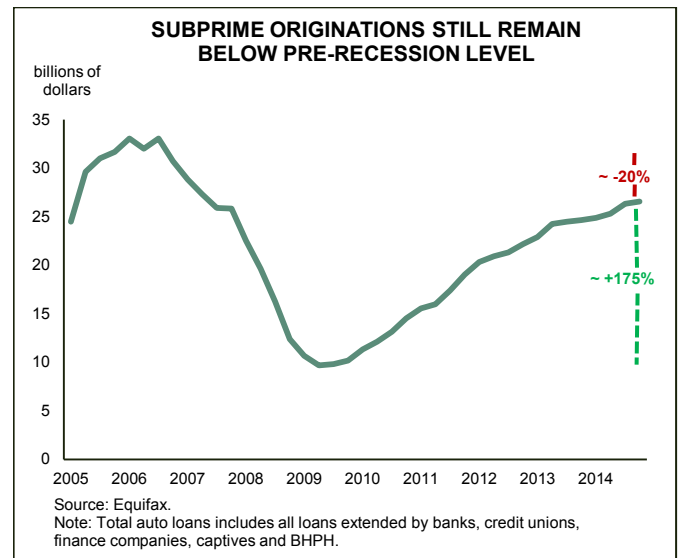
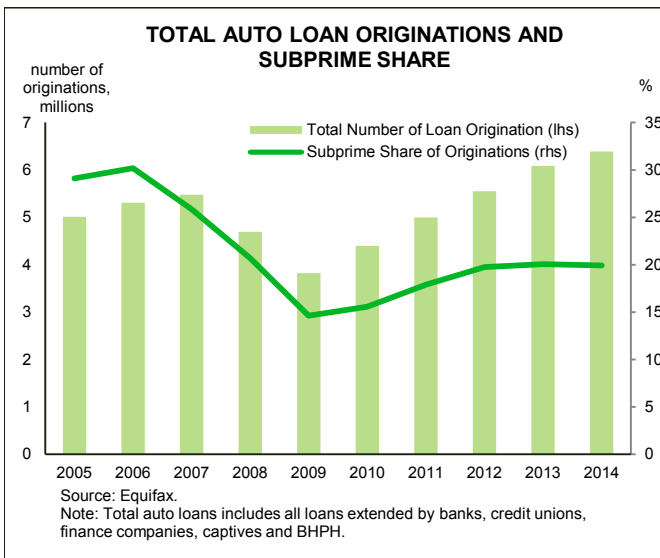
- As U.S. auto sales have moved back in line with pre-recession levels, some eyebrows have been raised surrounding the lending practices within the industry, particularly the resurgence of subprime lending and the shift towards longer loan terms.
- However, the data reveal that the rise in higher-risk loans is not as worrisome as some market watchers would suggest. The share of subprime loans has held steady over the past three years, delinquency rates remain low, and lenders are much more prudent in their underwriting practices.
- Many lessons can be learned from the financial crisis, on both the lending and the borrowing side, as the consequences of inappropriate underwriting practices can still be seen throughout the economy. However, there are many differences between pre-crisis lending in the housing market and the current state of auto lending.
- Meanwhile, lengthening loan terms present lower monthly payment for consumers, with the biggest risk occurring if the vehicle is traded in while the consumer is in a negative equity position, and the balance owed is wrapped into a new loan.
- Overall, the risk of a credit crisis in auto lending and the broader financial market remains low.

The auto market in the U.S. has roared back to life since the Great Recession. At 16.4 million units, the final 2014 new car sales tally marked the highest level seen since 2006. The momentum has continued into 2015, with the seasonally-adjusted annualized rate averaging 16.7 million units through the first five months of the year. While higher sales are certainly a welcome development for the U.S. economy, some eyebrows have been raised surrounding the lending practices within the industry. In particular, the resurgence of subprime lending and the shift towards longer loan terms has triggered concern among some market watchers. However, looking more closely at the data reveals that the share of subprime auto loans has held steady, delinquency rates remain low, lenders are now much more prudent in their underwriting practices and recent deleveraging has put households in a better position to keep up with their financial obligations. Moreover, while loan terms are lengthening, the biggest risk occurs if consumers trade in the vehicle early in the cycle and wrap the remaining balance into a new loan. Overall, it appears as though the risk of subprime lending and longer loan terms having a catastrophic impact on auto credit and the broader financial market is quite low.

Subprime lending not out of line

Many people exited the recession with tarnished credit histories, due to job losses, foreclosures or other hardships. A number of





consumers found themselves in new territory of suddenly being unable to keep up with loan payments. At the same time, credit markets dried up, as lenders exhibited extreme caution on who they were lending to. These influences led to two outcomes. First, more people had their credit scores downgraded to the “subprime” category¹, which we characterize as having a FICO score below 620². Meanwhile, lenders tightened up access to auto loans for those within the subprime space more significantly relative to the lower risk borrowers.

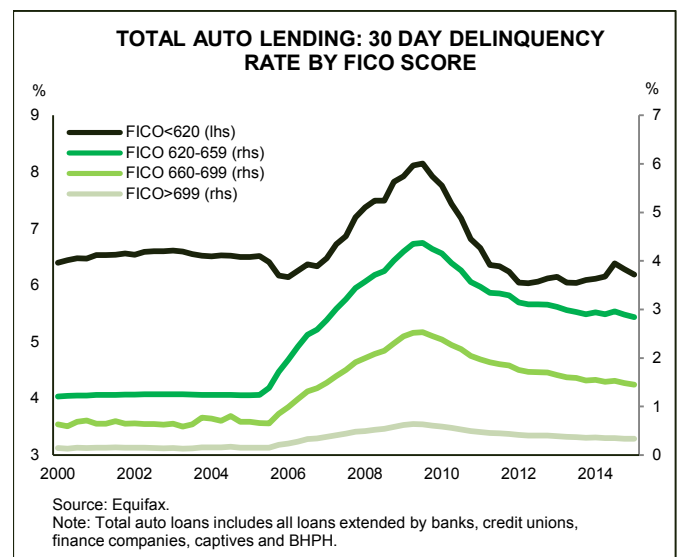
As the economy began to recover, auto sales slowly followed suit, driven primarily by consumers with higher credit scores as credit conditions remained tight in the early stages of the recovery. Once credit conditions began to loosen and lenders began to take on more risk, subprime borrowers were given more of an opportunity to purchase a vehicle. Since 2009, subprime auto loan originations have risen by 175%, and are closing in on 2007 levels. This growth has garnered a great deal of attention with questions being raised as to whether there is an auto lending subprime bubble forming similar to that in the housing market prior to the financial crisis.

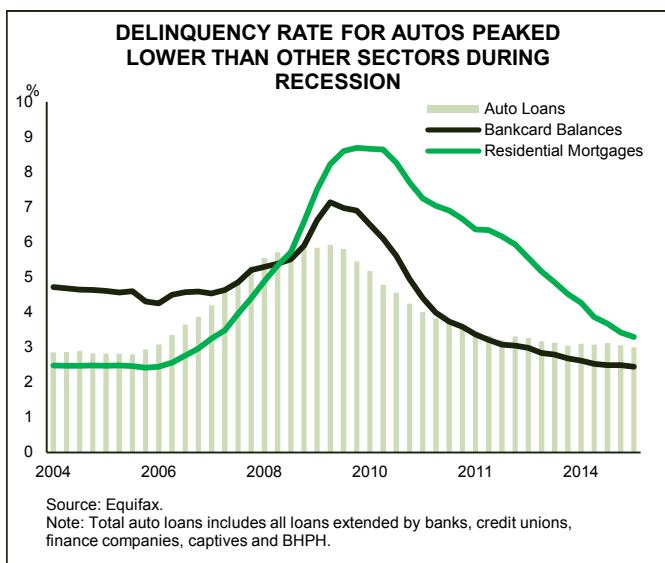
Looking at the underlying data, it doesn’t appear as though the increase in high risk auto loans is worrisome. First off, while subprime originations have been rising, their share of total originations has been steady at about 20% over the last three years and about 10 percentage points below that seen prior to the recession. Breaking the data down even further, it appears as though the bulk of subprime loans have been within the top margin of the credit score. What’s more, the lower the credit score, the lower the loan

amount on average. All this suggests that lending standards are actually tighter than the headline numbers would imply.

This has been reflected in the total delinquency rate for auto loans, which had been steadily trending lower through the earlier stages of the recovery before recently stabilizing just north of its pre-recession level. Looking at the 30-day delinquency rates across four subsets of FICO scores, all measures with the exception of FICO<620 have continued to trend lower. Nonetheless, subprime delinquency rates appear to have stabilized at a sub-4% level. Moreover, among all 30-day delinquencies, the rate remains roughly 0.2 percentage points below its pre-recession level, suggesting fewer missed payments today despite a comparable number of annual subprime loan originations.

On the whole, it appears as though the risk of a credit crisis within the auto sector is currently quite low. The





majority of auto loans – about 67% – are held by borrowers with a prime or super-prime rating. The rise in subprime lending shows that the overall economy is healthier and there is increased appetite among lenders for risk. At the same time, subprime is not what it used to be. First, there are consumers whose credit scores were tarnished by the recession, but are now back on their feet and likely don't carry the same risk that was associated with subprime a few years ago. Moreover, regulatory scrutiny has increased dramatically since the Great Recession, and lenders are being more prudent in their underwriting practices putting in place more checks and balances regarding a borrower's income and their ability to make monthly payments. We go into further detail on this in the upcoming section.

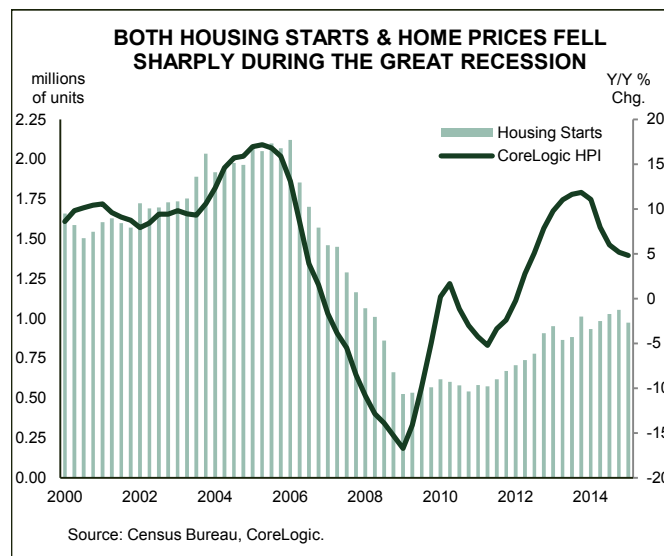
What's more, past experience – including during the financial crisis – shows that consumers tend to keep up with their car payments, even when struggling to meet other financial obligations. Indeed, delinquency rates on auto loans began to tick up during the recession, but peaked at 5.9% – well below that of other loans, such as mortgages, credit cards and unsecured personal lines of credit. All told, while the situation should be monitored, a bubble does not appear to be forming.

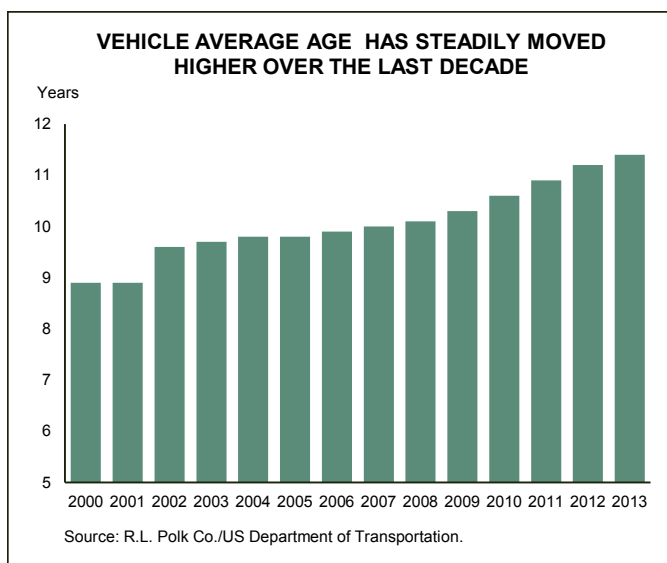
Subprime mortgage crisis not a good benchmark

On the surface, it may seem like there are obvious parallels between current subprime auto lending practices and those experienced in the subprime mortgage space preceding the financial crisis. Both periods reflect a lender's willingness to take on risk by increasingly extending credit to borrowers on the margin. However, there are a number of major differences.

For starters, vehicles are a depreciating asset. From a borrower's standpoint, this means that there is far less incentive to take on an unserviceable level of debt, given that the value of the underlying asset is eroding over time. This, however, stands in contrast to residential properties, which prior to the recession were largely considered to be an asset that would generally appreciate over time. This led many borrowers, particularly in the subprime space, to take on more debt than they could comfortably afford, under questionable loan terms including uncharacteristically long amortization periods and interest-only adjustable rate mortgages. The end result was a sharp increase in the mortgage debt service ratio – which increased by 1.4pp to 7.2% between 2004 and mid-2007 – which ultimately stretched many borrowers too thin, and pushed some into default. Since peaking in 2007, the mortgage debt service ratio has steadily trended downwards and currently sits at 4.7% – more than double that of its auto equivalent. This, alongside the fact that households have substantially deleveraged since the Great Recession, means that borrowers today have a much larger cushion should they need to weather any sort of unforeseen economic shock.

This leads us to the second major difference – consumption trends. At its pre-recession peak, the pace of home construction reached 2.3 million (annualized) units, far exceeding its depreciation-adjusted demographic fundamental level of roughly 1.6 million units. With residential construction having run well above this equilibrium level for more than several years, a wave of excess supply was created, ultimately tipping the scales in favor of the correction. In the auto space, however, there has not been the same level of excessive consumption.





Indeed, the surge in auto sales seen over the last few years follows the recession-induced plunge and has essentially helped move the needle back in line with demographic fundamentals. And, there is at least some evidence to suggest that the current pace of sales can be sustained for some time longer. The average age of registered vehicles in the U.S. in 2014 was 11.4 years – materially higher than the estimated 9.8 years recorded almost a decade earlier. Indeed, some of this likely reflects both increased car quality and better manufacturing warranties relative to that of the early 2000's. However, it also reflects the impact of several years of pent-up demand, as tight labor market conditions and reduced credit accessibility prevented many households from replacing their vehicles during and shortly after the recession. Moreover, with auto sales having only recently moved back in line with demographic fundamentals, some overshooting over the medium term seems likely, especially as households pull through purchases that were delayed in the earlier stages of the recovery.

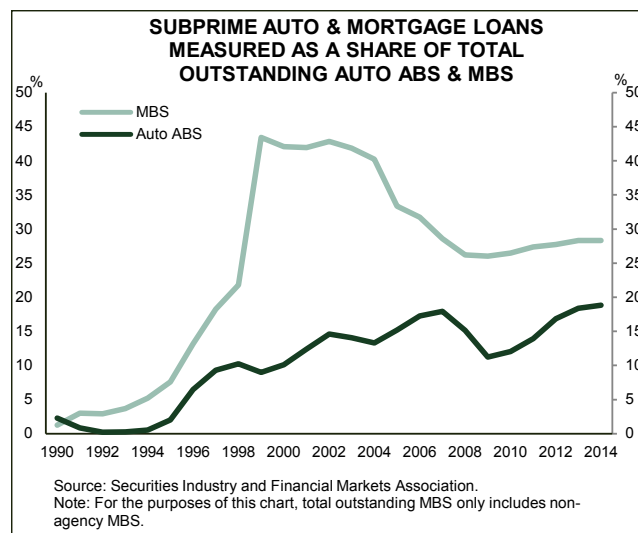
Third, while auto and mortgage lending are both forms of collateralized debt, the process by which each are repossessed if defaulted on are quite different. In the case of mortgage lending, foreclosure timelines can range anywhere from several months to years, depending on whether it occurs in a judicial or non-judicial state³. In the case of auto loans, repossession can occur after as early as two months of missed payments, with the remaining collections made in the 90-120 day range. Moreover, in terms of the overall economic impact, the buck generally stops at the individual who defaulted on the auto loan – leaving them with a somewhat tarnished credit score. In the case of mortgage default, home foreclosure can have much more serious economic

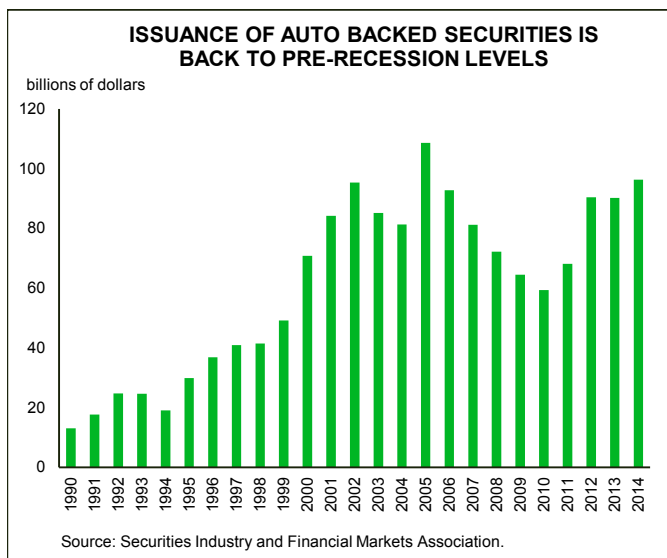
consequences, as it not only devalues the foreclosed asset but also properties in the surrounding area. If this ever becomes magnified, as it was during the housing bust, the economic impact can become much more catastrophic.

The fourth reason deals with differences in loans terms. Many of the subprime mortgages that originated prior to the housing bust were known as adjustable rate mortgages (ARM). Within these types of loans, rates would remain fixed over the first 2-5 years of the mortgage (i.e. teaser period) after which time they would reset to a much higher, variable rate. This pushed many unsuspecting borrowers, who were already on the cusp, into default. This is not an issue in the subprime auto segment though, as these types of loans never made it into the auto lending space. Moreover, because financing rates for most new car loans are fixed, borrowers are protected against future increases in interest rates – unlike those who were locked into an ARM.

Lastly, even after accounting for the recent rise in subprime origination activity, auto finance companies today are not nearly as dependent on secondary market funding as mortgage lenders were preceding the crisis. Indeed, annual issuance of auto asset backed securities (ABS) has moved back in line with pre-recession levels – with 2014 issuance having topped \$96 billion. Measured as a share of total outstanding auto ABS, subprime loans currently account for roughly 19% of the aggregate measure. While slightly above its pre-recession peak of 18%, the share still remains well below the comparable metric on the mortgage side. More specifically, subprime mortgages measured as a share of total outstanding non-agency mortgage backed securities (MBS) averaged 40% between 1999 and 2006.

Not only is the relative share of subprime autos much





smaller, the credit quality is also better today. The latter is a function of two different factors. First, financial institutions have become much more diligent in their underwriting practices since the Great Recession. In addition to having tighter credit standards, technological innovations such as instant employment and income verification have provided lenders with more information on which to base loan assessments. Second, the Consumer Financial Protection Bureau (CFPB) – founded as part of the Dodd Frank Wall Street Reform and Consumer Protection Act – was created to improve lending practices by forcing financial institutions to have more loan transparency, adhere to generic easy-to-read loan terms, and reduce broker incentives. All of these factors combined, have allowed both borrowers and lenders to better understand underlying risks, and ultimately make a more informed decision.

Given these key differences, it is unfair to paint the current auto lending landscape and that for the housing market prior to the financial crisis with the same brush.

Bank exposure to subprime risk is limited

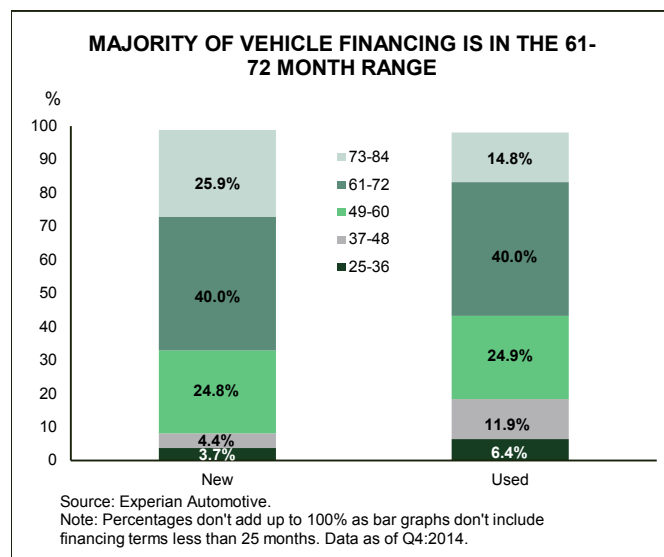
Looking at lenders, the majority of auto loans in the subprime space are held by finance companies. Indeed, banks have only a small share of their portfolio in the subprime segment and have very little exposure to the loans carrying the highest level of risk. In particular, while banks have also participated in the rebound in subprime lending, the segment accounted for only 11% of total originations in 2014, up from about 9% in 2010, and well below the peak of nearly 18% seen prior to the financial crisis in 2006. For finance companies, subprime loans accounted for 28% last

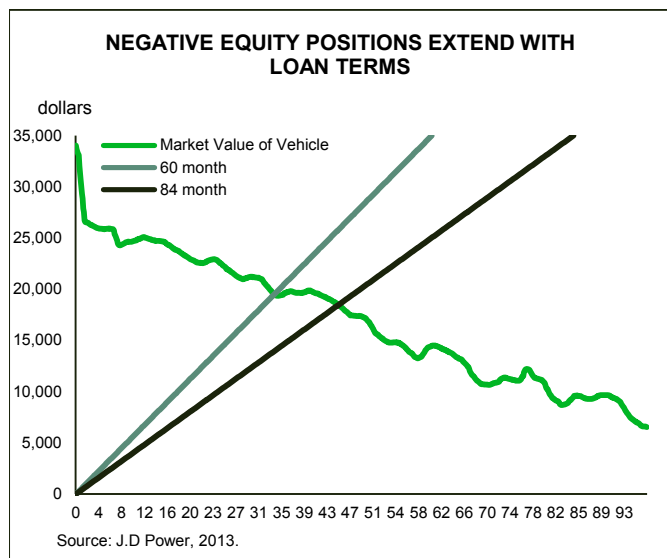
year – up from 21% in 2009, but still below the 39% share recorded in 2006.

Loans just keep getting longer

Another issue that has raised some red flags is the shift towards longer loan terms. While the 61-72 month range accounts for the largest share of loans at 40%, it is the 73-84 month segment that has seen the most growth – up nearly 30% y/y for new car purchases in the fourth quarter of last year, and nearly double what it was two years ago. Meanwhile, every other segment has lost share, led by the 25-36 and 49-60 month segments. Loan terms began to lengthen when leasing dried up during the recession, and have certainly been a key driver behind the rebound in auto sales, as it makes a vehicle much more affordable when spread over a longer period of time. Not only does it bring some consumers to the market that might otherwise be priced out, but it also enables other consumers to purchase a more expensive vehicle, or to add on options that they may not have chosen with a shorter loan term.

While certainly providing a boost to auto sales, lengthening loan terms have some drawbacks. First, the longer the loan, the longer consumers are in a negative equity position – owing more on the car than what it is worth. For those who plan to keep the vehicle until the end (or close to the end) of the loan term, this does not matter. However, for those who wish to sell the car within a shorter timeframe, this increases the likelihood that the consumer will be underwater when they want to get into a new vehicle, and they end up losing money. For example, on a \$35,000 vehicle at 0% interest, consumers are in a negative equity position until about 34 months on a 60-month loan and roughly 41





months on a 84-month loan. With a higher interest rate, it would take even longer to be in a positive equity position.

It is possible that the amount still owed on the vehicle (less the selling price) can be rolled into a new loan; however, that means that the customer is essentially still paying for a vehicle that they no longer own and has to borrow more than the value of the new vehicle when financing their next purchase. Moreover, if this behavior is repeated time after time, consumers get deeper and deeper into debt. And once interest rates rise, it could have serious implications for the auto finance market, with defaults rising, and lenders facing losses that exceed the value of any vehicle that is repossessed.

That said, vehicles are lasting much longer than they used to, so longer loan terms may just increase the trade-in cycle, mitigating any negative impact on the auto finance market – particularly once interest rates do start to rise. Moreover, as with the subprime lending patterns, lenders are more carefully scrutinizing each loan applicant and ensuring that the level of risk fits their portfolio. In fact, lenders could deny loans to consumers in larger equity positions. The return of leasing is also providing an alternative for consumers who prefer shorter trade-in cycles and lower monthly payments. Hence, the risk of longer loan terms having a catastrophic impact on auto credit and the broader financial market remains quite low.

Where to from here?

Auto sales in the U.S. still have some room to run. While we expect the growth in sales to slow after such a robust performance over the last few years, sales should continue to move closer to the highs seen early in the last decade.

We forecast light vehicle sales to hover near the 17 million unit mark this year and next. This should keep demand for both auto bank and finance loans elevated over the medium term with an annual growth rate of about 9% in 2015 before decelerating to a slightly softer 6% in 2016. As pent-up demand peters out, however, lenders must exercise caution in taking on risk and pricing it accordingly, as it is easy to get caught up in a growing market. Similarly, automakers must be careful in how long they offer these longer loan terms, and carefully consider the programs they offer that allow consumers to move into a new vehicle while still in a negative equity position. For example, it might be better for a consumer to pay off the remainder of his/her vehicle rather than rolling it into a new one. If the latter becomes common practice, it could have serious implications for the auto loan market.

Bottom line

Many lessons can be learned from the financial crisis, on both the lending and the borrowing side, as the consequences of inappropriate underwriting practices can still be seen throughout the economy. However, that doesn't mean that no risk should be taken. In fact, the willingness of lenders to take on risk will help stimulate the economy – only it must be done with proper judgment and priced accordingly. The new regulatory requirements that have come into place following the financial crisis will help to keep lending practices in check, mitigating the negative impact of any future shock. Still, it is important to keep a close eye on potential risk areas in order to prevent bubbles from forming.

While subprime lending in the auto market has been on the rise over the last few years, it does not appear to be worrisome at this point, as its share of total auto loans is not growing and is well below that seen prior to the financial crisis. As well, lenders are generally more prudent in their lending practices. Moreover, longer loan terms are reducing the monthly cost of owning a vehicle, which improves affordability for consumers. This of course can have negative implications for the auto finance market as well; however, as long as consumers are keeping their vehicles for much of the duration of the loan, the associated risk will be contained.

Dina Ignjatovic, Economist
416-982-2555

Thomas Feltmate, Economist
416-944-5730

End Notes

1. Despite there being no data on the migration of borrowers across FICO scores, a simple regression shows that a one percentage point (pp) increase in the unemployment rate leads to a roughly 0.3pp increase in the 30+ day delinquency rate. This alone accounts for more than half of the increase in the auto delinquency rate during the Great Recession, which undoubtedly had some negative impact on borrowers credit scores.
2. According to Equifax, consumers with a prime rating have a credit score above 640. We use <620 to characterize subprime borrowers due to the way the data is presented as well as the fact that it includes the borrowers with the highest risk.
3. In judicial states, lenders need to provide evidence to the courts that borrowers have become delinquent before the loan can enter foreclosure. This stretches foreclosure timelines considerably. In non-judicial states, lenders can issue notices of default directly to the borrower without court intervention, thus speeding up timelines.

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