

Talking Point

Is auto credit a car crash in slow motion?

June 2017

Relative to its modest market cap, the auto industry attracts a disproportionate amount of investor attention and press coverage.

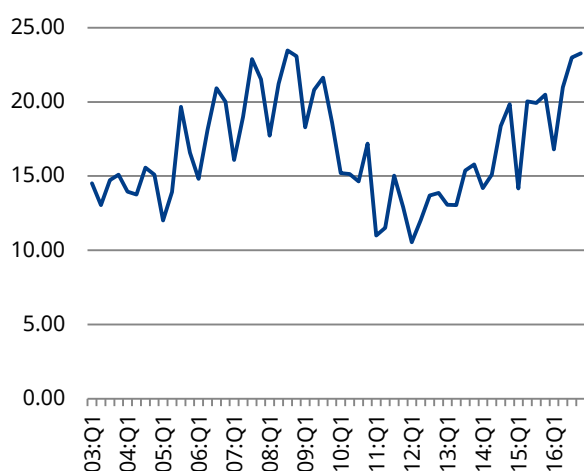
This is perhaps unsurprising. The product is very visible. It's involved in areas of exciting technological change, such as electric cars and autonomous driving. It is also lamentably prone to scares and scandals.

Even so, the number of column inches dedicated in recent months to the far less sexy topic of auto lending and auto credit deterioration is, superficially, surprising.

Auto credit data in the US has shown a marked deterioration in recent quarters. Newly delinquent auto loans reached \$23 billion in Q4 2016 and new "seriously delinquent" loans exceeded \$8 billion; both are absolute levels not seen since the depths of the global financial crisis¹ (GFC).

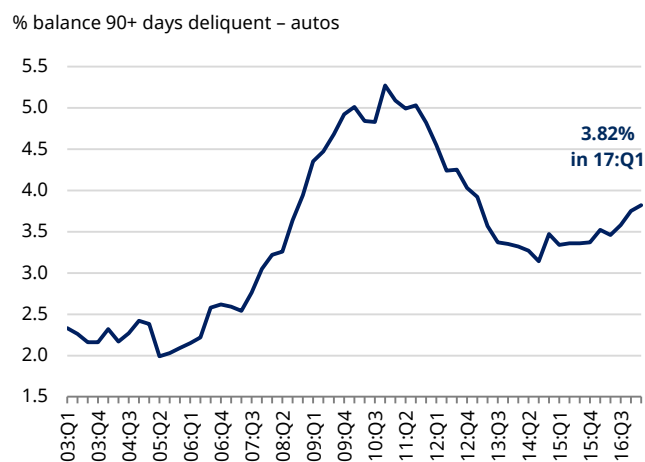
Given growth of more than 40% in the total outstanding auto loan balance since 2008, this amounts to a much less dramatic uptick in the delinquency *rate*, but that too has deteriorated by around 30 basis points (bps) in the last year. Auto loan asset-backed securities (ABS) have also shown warning signs, with losses on 2015–6 vintages running well above previous years.

Figure 1
Newly delinquent auto loans, US\$, billions



Source: New York Fed Consumer Credit Panel/Equifax. Bloomberg Finance L.P. 2017.

Figure 2
Auto loan delinquency rate, %



Source: FRBNY Consumer Credit Panel.

This development has garnered so much attention partly because it doesn't appear to fit with other indicators of consumer health. Consumer confidence has been rising, unemployment has continued to decline and trends in other areas of credit have been extremely benign².

So what is driving the deterioration in auto credit? How big a problem is it for the auto industry and the broader financial system?

¹Delinquent in this data set refers to 30+ days overdue; seriously delinquent 90+ days. The delinquency rate is the proportion of the total outstanding loan balance 90+ days overdue. Source: US Federal Reserve Bank of New York.

²The overall delinquency rate on consumer credit was 3.3% and up only 2bps off post-crisis lows achieved in 3Q16, with delinquency rates on mortgages – by far the largest component of consumer credit – continuing to improve.

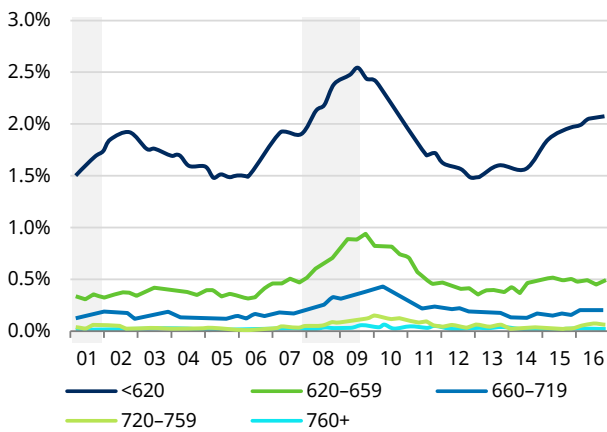
In our view, there are two key developments that are important for investors to understand. Firstly, credit performance for prime versus subprime loans has diverged. Secondly, the decline in used car prices is impacting “residual values” underpinning auto loans.

Subprime: reckless drivers

The first step in understanding the puzzle – and impact – of worsening auto credit data is to decompose the data according to the credit quality of the borrower: prime vs. subprime³. Figure 3 shows the flow of newly delinquent loans by credit score at origination, i.e. when the loan was granted. The scores of some borrowers will inevitably change over the life of the loan.

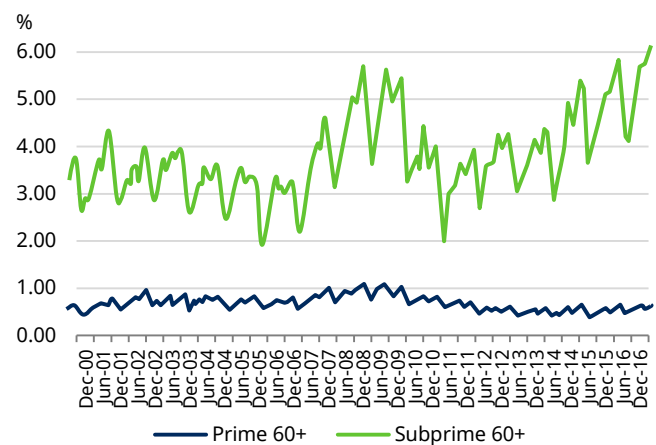
We can clearly see that subprime loans, those with a FICO score of less than 620, have seen by far the biggest deterioration. The trend for higher quality borrowers looks much more like data for other areas of consumer credit i.e. normalising but still very benign. We can find more evidence of a divergence between subprime and prime credit by examining the ABS data, where delinquencies and losses on subprime books are now back at all-time highs. For prime loans, losses remain close to record lows.

Figure 3
Flow into 90+ delinquency by credit score at origination, 4-q moving average



Source: Bloomberg

Figure 4
Auto loan ABS Delinquency Indices



Source: Fitch Ratings, Inc.

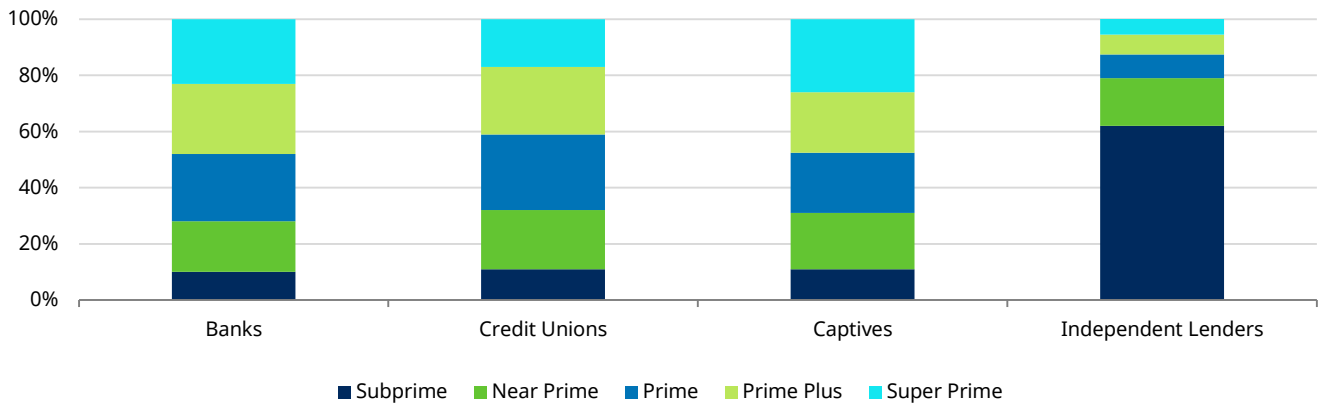
The alarming trends in the subprime space appear to be symptomatic of a marked deterioration in underwriting quality since the GFC. However, the data suggests this has not been driven by banks and automotive captive finance companies (henceforth “fincos”). Rather, the culprits appear to be new entrants to the market: mostly private equity-backed non-bank financials (NBFs).

New capital was attracted to the space by the compelling risk/reward in auto lending. Typically, delinquency rates are low across the cycle because customers need their cars even once they default on their homes. Favourable regulation and low rates then enabled the new entrants to participate. These lenders have particularly focused on subprime because this is the least competitive part of the market, mainstream banks having been forced, by regulation and stressed balance sheets, to focus on the highest quality borrowers.

Non-bank lenders accounted for the vast majority of sub-prime lending in 2015 and are even more dominant in the “deep-subprime” space: those with credit scores below 600, or no FICO score at all. Meanwhile, established lenders have actually been pulling back from the market, with originations for Santander Consumer and Ally Financial down 25% in Q4 2016. Fed surveys show tightening bank lending standards in auto loans since early 2016.

³Prime and subprime are not hard and fast categories, but prime in the US usually refer to borrowers with ‘FICO’ scores (assessed by 3rd party credit rating agencies) above 620; subprime <620 or in some cases no credit record at all.

Figure 5
2015 origination by lender type and risk tier



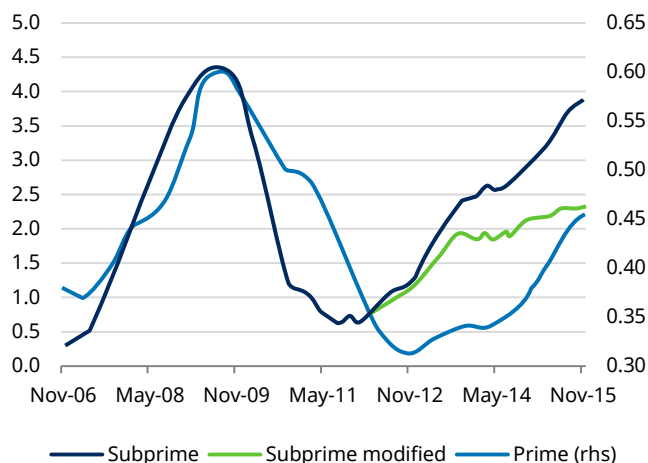
Source: TransUnion consumer credit database.

NBFs have also been heavy users of ABS markets, hence the ABS data looks particularly alarming. Before and during the financial crisis, ABS issuance – even subprime – was dominated by a handful of banks and established lenders. Now the market has fragmented such that the top 20 account for just 50% of issuance. Ratings agency Fitch has ratings on only 3 of 23 subprime lenders with active ABS platforms, accounting for just 12% of subprime ABS issuance in 2016.

Competition between these inexperienced lenders has resulted in a “race to the bottom” in underwriting standards, which is now showing up in credit metrics. Aggregate auto credit data is therefore distorted, as deep subprime loans from questionable lenders account for a growing share of outstanding balances. Although overall subprime as a percentage of total auto lending is roughly the same, this obscures vastly divergent trends between lenders.

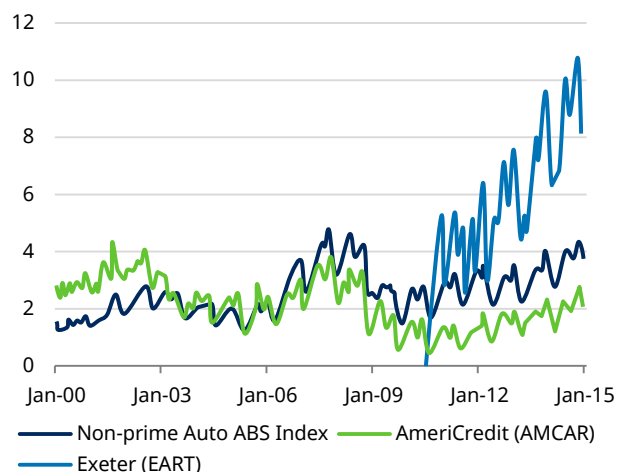
S&P reports “modified” subprime ABS delinquency rates, excluding some of these new lenders, which show a much less severe deterioration. We can also look at the listed ABS for individual lenders. Figure 7 shows the aggregate delinquency data, and compares that data to one established lender (AmeriCredit) and one new lender (Exeter). The latter is shown experiencing delinquency rates around 5x the former.

Figure 6
60+ Day ABS Delinquency Rates by Credit Quality (% ttm)



Source: UBS, S&P.

Figure 7
60+ Delinquencies



Source: J.P. Morgan, Intex.

Canary in the coalmine?

The deterioration in aggregate auto credit metrics is therefore largely caused by a relatively small portion of the market. It's also prompted by niche lenders rather than systemically important financial institutions. This, fortunately, limits the risk to the wider financial system.

It is also important to note that, despite headline-grabbing comparisons with mortgage-backed securities, subprime auto lending is actually quite a small pool. It represents around \$270 billion, or less than 25%, of a total \$1.16 trillion of outstanding auto loans. This is around 2% of the \$12.6 trillion total in US consumer credit.

As we have noted, banks and auto fincos are now exposed almost exclusively to prime, where we see a very gradual normalisation of credit with delinquencies still at very low levels. Prime auto lending tends to be a very low risk business across the cycle. Prime ABS losses peaked at 0.6%, and credit loss ratios for auto fincos at less than 1%, even at the heights of the GFC.

That said, it is hard to analyse the risk associated with these inexperienced lenders in a downturn. Most of them didn't exist during the last one. The performance of their loans even in a benign macroeconomic environment, combined with thin capital buffers, suggests we will likely see bankruptcies in a downturn. The lenders and investors with exposure to these companies will suffer, although the ABS will probably hold up better given very strong credit enhancements. We would also note that the phenomenon of growing NBF participation, focused on low-income consumers, is not unique to auto loans. NBFs have accounted for two-thirds of total incremental consumer credit since the GFC.

(Less) cash for clunkers: the “residual value crunch”

We mentioned that there were two main developments in the auto credit space that investors should understand. The second is that used car prices in the US – which determines the “residual value” of the collateral backing the loan or lease – have been falling. This matters, even for high-quality lenders.

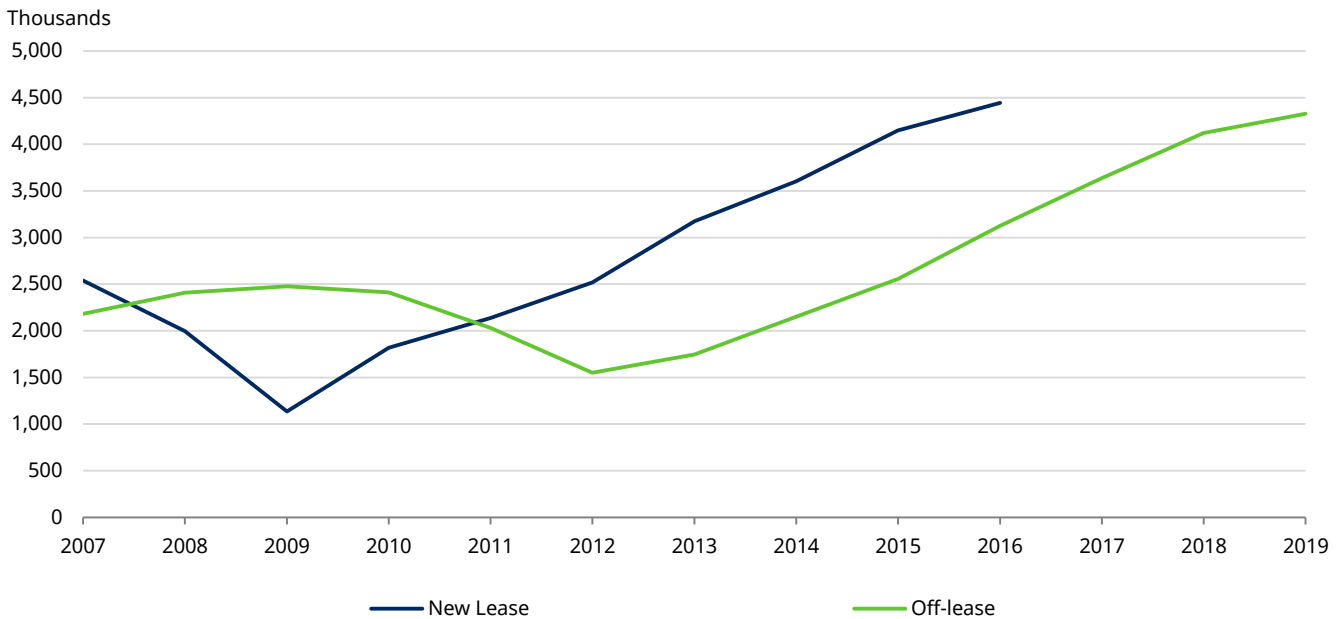
Declining residual values cause loan losses to rise because recoveries in event of default are lower, even if the number of defaults doesn't change. There are various indices for tracking used vehicle pricing which make subtly different adjustments, but the clear and consistent commentary is that used prices are falling. The pace of deterioration has accelerated year-to-date: the NADA index, which focuses on vehicles aged 0–8 years, fell 7% in Q1. Headline used vehicle inflation is also in increasingly negative territory.

The problem in the used car market is primarily one of supply rather than demand⁴. The inevitable consequence of the recovery in new car sales since the recession is that we are now facing a wave of used vehicles as the original owners upgrade. In particular, we are seeing rapid growth in “off-lease” volumes. These are vehicles returned at the end of leasing contracts, typically after three years.⁵ This growing availability of “nearly new” cars is depressing pricing. Over three million vehicles came off lease in 2016, a 22% increase year-on-year. A further 12 million cars will flow into the market over 2017–19, so the pressure on residuals is only likely to increase from here.

⁴With the possible caveat that particularly weak Jan-Feb data points may be partially down to delayed tax refunds in the US weighing on transaction activity. The NADA index stabilised sequentially in March and other sources have also mentioned somewhat better recent data.

⁵For the uninitiated, a lease contract differs from a loan in that the customer never officially owns the vehicle; they rather ‘rent’ it from the finance company for 2–3 years for a fixed monthly fee and return it at the end of the contract, usually rolling into a fresh contract on a new vehicle. In a lease contract, the direct residual value risk rests with the finance company whereas with a loan it rests with the customer. Lease penetration has risen significantly this cycle, peaking at 33% in 2016 vs. 23% in 2008, as low rates and robust residuals made them attractive for both sellers and buyers – the average monthly payment is around \$90 lower for a lease versus a loan.

Figure 8
New and off-lease vehicle volumes



Source: Bank of America Merrill Lynch, Schroders

This is not a problem providing loans and leases are appropriately priced. Off-lease volumes are very predictable. Carmakers and lenders say they were anticipating falling residuals as used volumes grew, and had factored that into their contracts. Yet the pace of recent deterioration has exceeded some companies' expectations, requiring them to take additional provisions in their finance operations. Even so, we do not see a significant risk to company earnings.

Firstly, while used supply will continue to rise, the biggest increase in off-lease volumes occurred in 2016. It should be somewhat more modest going forward, with companies now pulling back on new leasing activity.

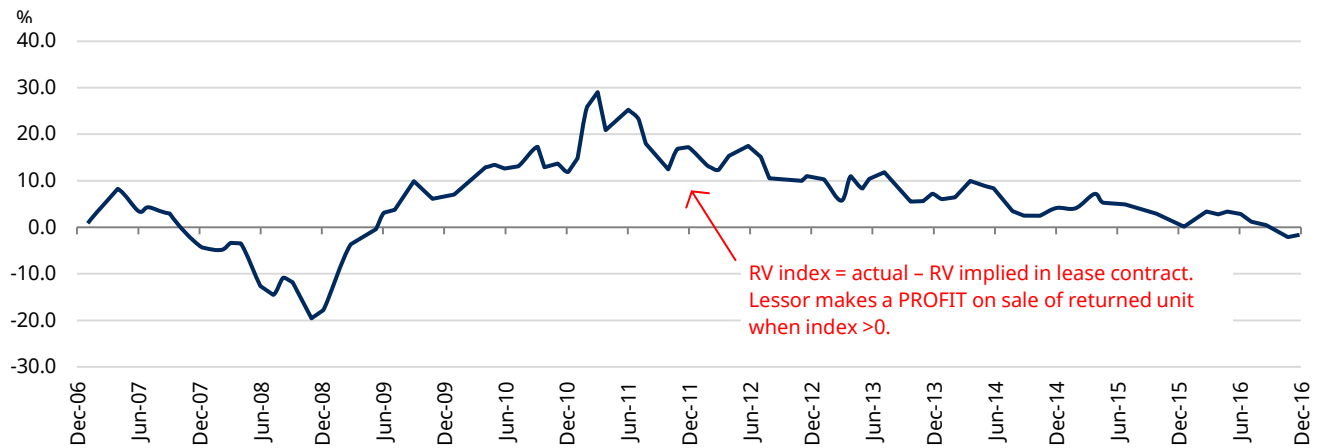
Secondly, automakers, especially premium marques, have some ability to manage their off-lease units via control of the dealer channel. As such, realised values tend to be better than on units sold at auction (which inform used price indices).

Thirdly, as mentioned, most auto fincos were already using conservative residual value assumptions in their underwriting. These assumptions are also adjusted and provisioned for on a rolling basis, over the life of a contract, rather than waiting until the vehicle is returned and taking a big one-off hit. The impact is therefore smoothed and modest in any given quarter. In the past, we have only seen big impairments when residuals deteriorated sharply, as they did in the GFC. We see this as unlikely to repeat unless the broader demand environment takes a turn for the worse. And, according to Bernstein, even a 10% writedown of the US lease book would be worth a modest 3% of market cap for BMW and Daimler.

That said, we do expect profitability in auto fincos to deteriorate across the board. This may be due to upward revisions to provisions. But, more importantly, fincos have been making supernormal profits on the sale of leased units since the crisis. We believe this period is now coming to an end.

In the last few years, conservative residual value assumptions combined with robust used car prices have meant that fincos were able to sell vehicles returned to them at the end of a lease for more than the value implied in the lease contract, booking a profit. Fitch's auto lease residual value index has been in positive territory since 2009, implying a profit at sale, but has steadily declined from its peak in 2011. It finally turned negative at the end of last year. This is consistent with evidence from listed ABS books.

Figure 9
Auto Lease Residual Value Index



Source: Fitch Ratings, Inc., Schroders

Diversion, or the end of the road?

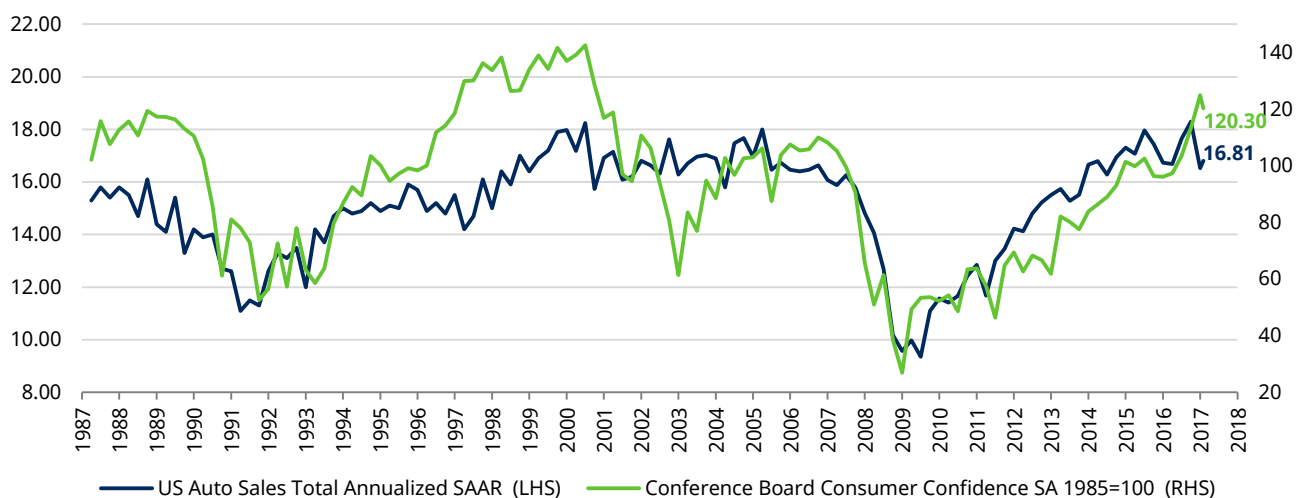
As discussed, we do not see a significant direct risk to automotive fincos from either subprime credit or deteriorating residual values. But we are much more concerned about the impact of falling used car pricing and tightening credit conditions on the wider auto market. This has potentially far more damaging implications for the day-to-day industrial business of automakers.

Rising availability and falling prices of high-quality “nearly new” cars has a substitution effect on demand for new cars. This is compounded by lower residual values, which translate into lower trade-in values. 50% of new car sales in the US use a trade-in as part of the purchase, and more than 30% of trade-ins are already underwater. This, in turn, is aggravated by tighter credit standards, as poorer residuals cause lenders to pull back on cheap lease deals. Rising rates also impact credit costs. All of these factors weigh on demand for new vehicles.

That said, we do not expect a sharp downturn in sales volumes, for two key reasons.

Firstly, sales volumes are far more correlated with broader indicators of macroeconomic and consumer health than credit or used car pricing. It is very unusual for volumes to decline in the absence of a broader economic downturn. Consumer confidence in the US remains robust, labour market data is very healthy, and the University of Michigan index of vehicle buying conditions remains in strongly positive territory.

Figure 10
Cons conf vs. auto SAAR (seasonally-adjusted annualised rate of sales)



CONFCON Index (Conference Board Consumer Confidence SA 1985–100). Quarterly 15M.
Source: Bloomberg Finance L.P. 2017.

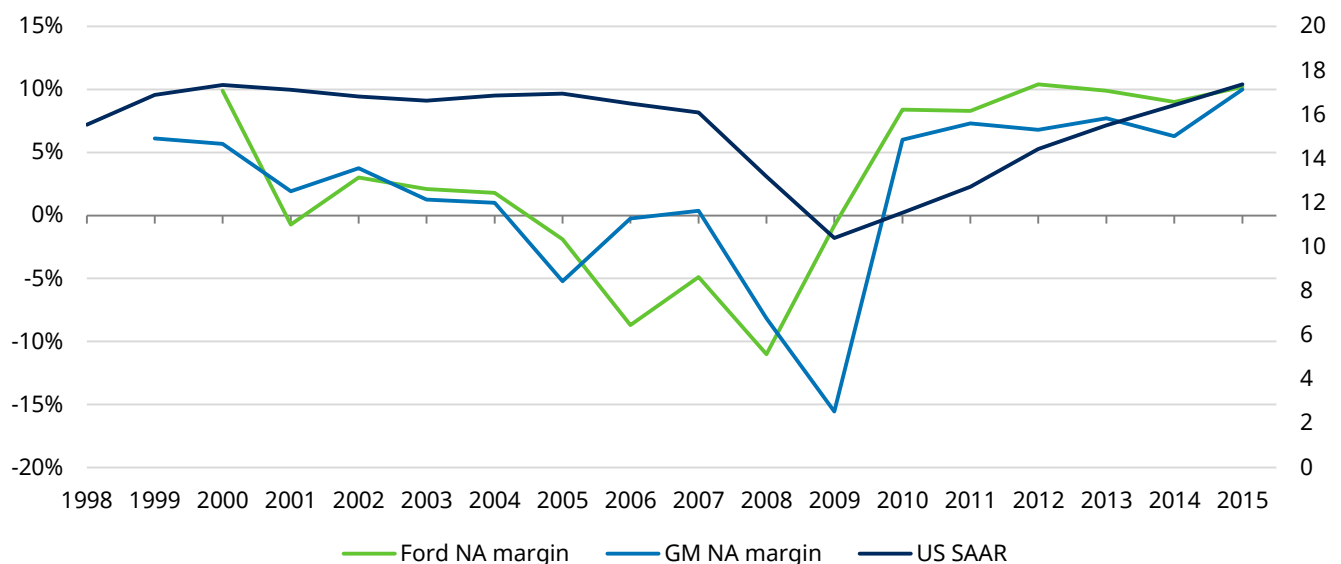
Secondly, the high fixed costs associated with auto manufacturing mean that automakers have a strong interest in supporting volumes. In our view, volumes are more of an “outcome” than an exogenous variable. Car manufacturers can generate essentially any sales figure they like by tweaking prices, discounts and financing packages.

Industry profitability in North America is high today. Stalwarts Ford and GM are making record margins, so there is plenty of “room” for automakers to spend on incentivising volumes. Economic theory would dictate that this is rational as long as price exceeds variable cost. Indeed, we have seen sales incentives steadily grind higher over the last couple of years as volumes have plateaued. Sales incentives were up 14% YoY in April, to an average of around \$3500 per vehicle.

Hence our key concern at this point in the cycle is not credit, or particularly volumes, but profitability in the core industrial operations. We expect incentives – including subsidised financing – to continue to increase, to shield the consumer from the impact of falling residual values and higher rates. Furthermore, profitability in recent years has been supported by positive trends in price and vehicle mix, as cheap financing has made it affordable for customers to buy larger and high-spec models. This tailwind will now dissipate, and take-rates on highly profitable options packages (plush interiors, active safety, ‘infotainment’ systems) will flatline or decline. All of these factors will weigh on margins.

In the last cycle, we saw Ford and GM’s North America margins decline precipitously despite flat volumes. While we do acknowledge that both companies have subsequently improved their cost structures, we do not ultimately believe that “this time is different”.

Figure 11



Source: Schroders

Some pot holes to swerve, but no crash

While some of the headline data on auto credit looks alarming, our analysis suggests there is no reason to panic. The risks to both the auto industry and the wider financial system appear modest at this stage. As we have discussed, credit risk is largely contained to the subprime space, which represents only a minority of total auto lending and a tiny proportion of overall consumer credit. Furthermore, while some NBFs will come unstuck in a downturn (or sooner), mainstream lenders should be relatively well-insulated.

Our more serious concern is wider profitability in the auto industry. The flood of nearly-new cars will continue to depress used car pricing, eroding profits directly via sales of off-lease vehicles and indirectly via the knock-on effect on new car demand, especially as credit conditions tighten. Although we expect the actual number of units sold to remain fairly steady, the incentives required to defend sales volumes against this dynamic are likely to hurt profits overall. At the same time, automakers will face higher inflation in other areas of their cost base, with increases in raw materials prices, wages, and the cost of meeting tighter emissions and safety standards.

Automakers are already trading at very depressed valuations, suggesting the market recognises that today's margins are at or close to cyclical peaks. We believe there are pockets of investment opportunity where some stocks are pricing in an unrealistic deterioration in margins given the broadly benign economic outlook. Even so, we recommend a cautious approach to the sector with a focus on balance sheet strength. We also regard suppliers and tyre makers as more attractive at this point in the cycle given that they are more geared to market volumes than pricing, although this is somewhat reflected in premium valuations.

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