GRANT'S
INTEREST RATE OBSERVER®
Vol. 35, No. 04b | Two Wall Street, New York, New York 10005 • www.grantspub.com | FEBRUARY 24, 2017

Disabled vehicles

For long-range worry, imagine a Detroit that produces not 16 or 18 million new vehicles a year, but three or four million (why own a car in the Age of Autonomy?). For a timelier set of concerns, observe today's falling used-car prices, weakening automobile credit metrics and at-risk auto-lease market.

Cars, credit and trouble is the theme of the essay now in progress. At the end of the road, the patient reader will encounter a bearish analysis of CarMax, Inc. (KMX on the New York Stock Exchange). En route, he or she will rediscover how used-car pricing touches just about everything that rides on four wheels, from new-car sales to new-car sales incentives to the residual values of cars and trucks on lease. Deep and nuanced are these interconnections: As the drivetrain is connected to the engine, so is the knee bone connected to the thigh bone.

The banged-up state of auto finance is topic No. 1. National loan delinquencies, prime and subprime alike, rose by 13% year over year in the fourth quarter, to 1.44% of all loans outstanding. It was the highest level of slow payments since the fourth quarter of 2009, according to credit bureau TransUnion. The deterioration in credit came despite a 2.2 million lift in 2016 non-farm payrolls and a year-end unemployment rate of 4.7%, down from 5% at year-end 2015.

EZ financing terms and a post-recession quirk that sustained lofty used-car prices were the sources of recent happy credit experience. Now lenders are beginning to say "no" again, while the prices of used vehicles are drooping.

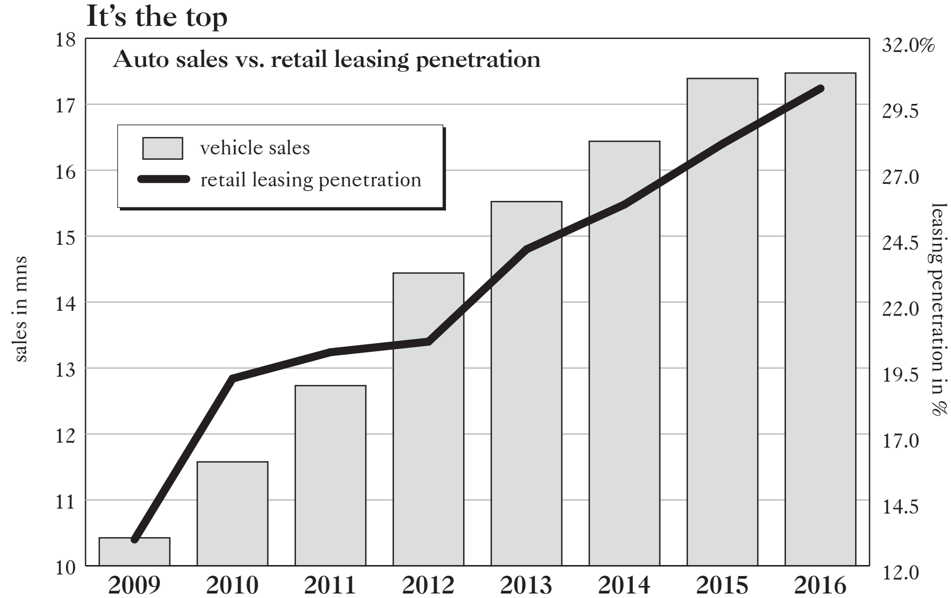
The rise in delinquencies and charge-offs is no isolated subprime problem. It has infected alike Ally Financial, Inc. (ALLY on the Big Board), the former captive lender to General Motors Corp. whose focus is the prime borrower, and Santander Consumer USA Holdings, Inc. (SC, also on the Big Board), the largest subprime lender (*Grant's*, March 7, 2014).

As usual, trouble began with a smile. Post-recession improvement in credit quality delivered low levels of realized losses. Emboldened, lenders shed bust-era inhibitions. By 2016, 31% of loans financing new-vehicle sales involved negative equity from a trade-in, up from 25.6% in 2013.

"[Lenders] were throwing too much capital at the sector because returns were decent and credit was strong," John Hecht, a Jefferies analyst who covers Santander Consumer and Ally, tells colleague Evan Lorenz. "It's not that credit deteriorated, but underwriting got aggressive and now lenders are realizing that they are not going to have suitable rates of return because of the terms of the loans being too loose, so they are tightening and so capital is flowing out."

Recently responding to the Federal Reserve's opinion surveys concerning new-auto loans, senior bank lending officers have ticked the box marked "tighter." In the third quarter of 2016, industry-wide originations fell by 0.7% year over year; it was the first such decline since the fourth quarter of 2009. Originations did bounce back in the fourth quarter of 2016—up by 8% from the year-earlier period—but it was a recovery bought and paid for by an out-

It's the top



sources: The Bloomberg, Manheim, Inc.

pouring of auto-manufacturer incentives (of which more later).

Through the full 12 months of 2016, auto loans outstanding grew by 8.7%, to the weighty sum of $1.2 trillion. Compare and contrast the three years through 2010, when outstandings slipped by 2.9%, 8.7% and 1.5%, respectively. In consequence, new-vehicle sales, which averaged 16.7 million between 2002 and 2007, collapsed to 10.4 million in 2009 and did not break the 15 million level again until 2013, four years after the recession ended.

Fewer new-vehicle sales eventually mean fewer late-model used cars. The Manheim U.S. Used Vehicle Value Index, which plunged by 11% between 2007 and 2008, rallied into 2010, gaining 23% from its December 2008 low. More remarkable was the stability that followed the bust and boom. Since April 2010, the index has virtually flatlined.

"High and steadfast used-car prices grease the wheels of the automotive market," Lorenz points out. "Nine out of 10 car purchases involve a trade-in, so strong used-car prices make new vehicles more affordable. According to Kelley Blue Book, new-car prices have compounded by 2.5% per year since 2009, surpassing the 1.6% compound annual growth in the CPI. For that inflationary outperformance, you can thank (if gratitude is called for) the strength and firmness of used-car prices. Lenders and lessors, too, have prospered. The more valuable a used car, the higher the recovery in case of default and the lower the risk that, at the end of a lease, the residual value of the leased vehicle will disappoint. As a result of this virtuous cycle, new-vehicle sales totaled 17.5 million units last year, surpassing the housing-boom peak of 17 million units in 2005."

The leasing business might be the top beneficiary of the used-car renaissance. Auto leases are essentially three-year loans. What the lessee pays, more or less, is the difference between the price of a vehicle at the start of the lease and its estimated value at the end. The higher that ending value, the lower the monthly lease payment. In 2016, 30% of consumer vehicle purchases were financed by a lease, up from 28% in 2015, 13% in 2009 and 28%—the previous peak—in 1999.

In the wake of this multi-year boomlet, off-lease vehicles are crowding dealer lots. Manheim estimates that 3.6 million formerly leased cars and trucks will come up for sale this year, a 16% increase from 2016, and that 4 million more off-lease rides are due to follow in 2018. Contracts for most of this year's off-lease cohort were inked in 2014 when lease penetration was only 25.7% and total new-vehicle sales just 16.4 million. By 2016, lease penetration reached 30% and overall vehicle sales hit 17.5 million.

The last peak in a lease cycle occurred in 1999. In March 2002, *The Washington Post* was still describing the fallout: "The surge in leasing since the mid-1990s created a glut of nearly new cars on the used-car market, driving down their price."

Manheim, in its 2017 Used Car Market Report, takes an unsentimental look back at "leasing gone wrong" in the same late-Clinton era. "Factors at play in the leasing-gone-wrong scenario include," says Manheim, "having the wrong car (the one that couldn't be retailed), the wrong customer (the one who couldn't get financed), the wrong residual (guidebooks were overly optimistic and residual was bumped another 5 points or more in the lease contract) and the wrong remarketing process (or, to be honest, there was no remarketing process at all)." Between December 2000 and April 2003, the Manheim Index documenting used-car prices fell by 12%.

"It's unclear," comments Lorenz, "how a functioning car can be wrong (the price can be wrong) or how a customer who qualified for a lease can be wrong. But it is clear how a residual estimate can be wrong—after all, finance companies have no more insight into prices three years hence than you or I do. A 2002 Consumer Bankers Association study found that lessors booked an average loss of $2,914 for every car returned to them in 2001. Applying the 2001 loss levels to the 4.4 million vehicles leased in 2016 would imply $12.8 billion in losses for that vintage alone."

Lorenz asked Laurence Dixon, a director of market intelligence for the National Automobile Dealers Association (NADA) Used Car Guide, a unit of J.D. Power and Associates, how the current leasing environment compares with the 1999 peak. "Used-vehicle price analytics are much better today," Dixon replied. "The remarketing process is much better today than it was then. However, the risk remains just like it did back then. And there is the fact that leasing is much more significant today than it was in the late 1990s. It hit roughly 28%. Last year, it was around 30%. We surpassed leasing from a penetration standpoint a couple of years ago. From a sheer volume standpoint, we are way beyond what occurred in the late 1990s. There is more skin in the game in leasing today than there was back then."

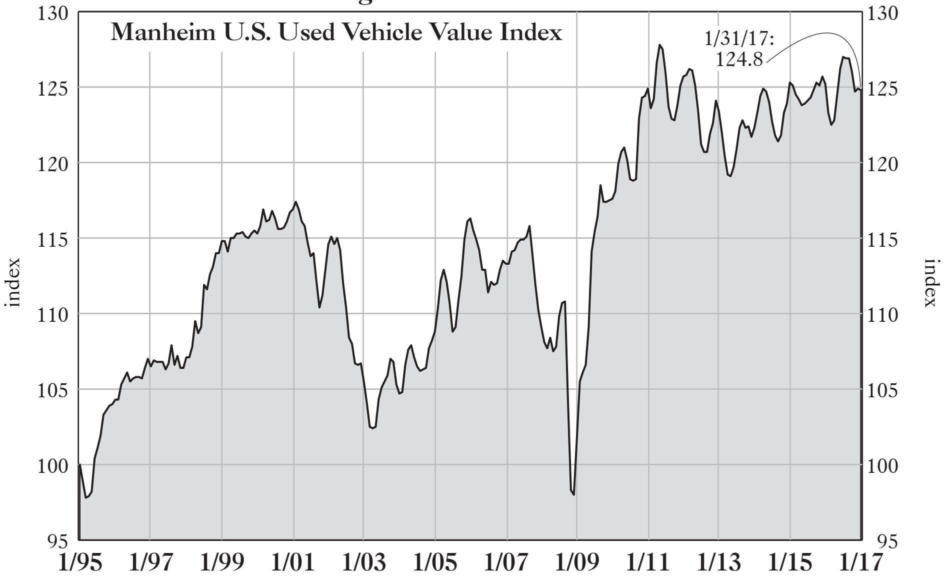
Then, again, it's never nobody's skin: *Someone* bears the loss or earns the profit. A living example borrowed from the auction site LeaseTrader.com: Infiniti Financial Services is trying to rid itself of a lease on a 2014 Infiniti Q50 with 6,775 miles on the odometer. The original lease term was 42 months, on which there are 15 months left. Infiniti had set the lease-termination value (at which the lessee could buy the car) at $25,844. The average auction price of that 2014 Q50 today is $18,997. Which is to say that Infiniti's finance arm is likely staring at a loss. Want to assume this lease gone-wrong? Infiniti would pay a willing counterparty $3,500. This example is not an outlier.

Used-car prices are falling, all right, though you won't find the evidence on your Bloomberg screen. Measured January over January, the Manheim Index (MUVINDEX on Bloomberg) scarcely budged, down by just 0.3%. Compare and contrast that with the J.D. Power Used Car Guide Vehicle Price Index, which registered a January decline of 6.6%. Now peruse the fourth-quarter conference-call transcript of any auto lender. The plaints of the lenders concerning high used-vehicle depreciation square with the Power data, not Manheim's.

Compact and subcompact cars have shown the biggest losses to date, a fact attributable to the normal consumer response to $3.50-a-gallon gasoline in 2013. As the 2014 energy-price crash produced the opposite normal consumer response, tomorrow's mix of off-lease vehicles will feature more SUVs and trucks.

"The writing has been on the wall for a long time as far as compact and midsized cars, even luxury compact and midsized," says Dixon. "Car demand in general has been weak. But for trucks, pricing has been so exceptionally strong that there is the

Post 2011: Another 'great moderation'



source: The Bloomberg

temptation to believe that strength will continue on for the next several years and the risk that they may be overestimating the residual on trucks is higher than it is on cars. However, we do expect significant [off-lease] supply increasing in compact utility, midsized utility as well as large and midsized pickups and large utility. We expect pretty significant declines in prices relative to where they've been for those segments."

A bear market in used cars is never good news for Detroit. It is especially unwelcome in today's setting of rising (or at least risen) interest rates, stiffening consumer prices and tightening credit. January readings for the CPI and average weekly wages showed year-over-year gains of 2.5% and 1.9%, respectively. The resulting 0.6% decline in real wages was the first fall in inflation-adjusted pay since December 2013. One month may well signify nothing. What lends contextual interest to the real-wage datum is the anomalous drop in gasoline demand in January, the first in any non-recession month on record, according to a Feb. 7 commodity-market comment by analysts at Goldman Sachs.

Auto makers, who as a group hold bloated levels of inventory, are responding to dropping residual values and tightening customer finance with strong new-sales incentives. According to J.D. Power, the inducements that manufacturers offered per new vehicle rose by 12.5% in 2016 to reach $3,600, equivalent to 10% of the manufacturer's suggested retail price (MSRP). In January, those incentives ticked up to 10.5% of MSRP, Power reports, with concessions on sports utility vehicles being especially aggressive; to move SUVs, sales bait was equivalent to 8.7% of MSRP, up from 7.2% in January 2016.

All things being equal, people prefer new cars to old cars (that "old car smell" is something you want to get rid of). So it follows that sales gimmicks that reduce the cost of new cars must likewise undercut used-car prices.

"Technological obsolescence presents another clear and present danger to used-car prices," Lorenz observes. "Cell phones, Facebook updates and tweets from the commander-in-chief are distracting millennials behind the wheel as well as behind the desk. Traffic fatalities, after decades of decline, have jumped by nearly 9% a year over the past two years. Insurance companies are raising policy rates by 5% to 10% to compensate for this retrogression. Affordable advanced driver-assistance systems (ADAS in industry-speak), like forward-collision warning systems and autonomous emergency braking (in which the breaks engage when the vehicle senses an imminent crash), can save distracted drivers from themselves."

Yet, as cheap as they are (less than 1% of the average sticker price) and as effective as they are in reducing crash rates (by 50% to 70%), they are not yet standard equipment; only 12% of new cars come pre-defended with ADAS technologies, Morgan Stanley relates. Now imagine that these safeguards become standard-issue and that insurers begin penalizing non-ADAS drivers for doing without.

In such a scenario, non-ADAS-equipped used vehicles (like airbag-less cars) could enter their own particular bear market. "Our base case for used-car price decline is in line with a 'normal' cyclical downturn of 20% by 2021," the Morgan Stanley analysts conclude. "Our bear-case scenario sees used-car values falling 50% over five years (-13% per year), representing as much as $1 trillion of value erosion applied to the entire used [vehicle fleet] in the U.S. market alone."

Automotive trouble, if trouble is coming, will surely find CarMax, Inc. (KMX on the NYSE), the nation's largest used-car retailer. In the three months till Nov. 30, 156,789 used vehicles drove off 169 CarMax lots. Another 91,973 were hammered down at various CarMax auctions. CarMax Auto Finance (CAF), the company's captive finance subsidiary, facilitated 45% of the parent's sales in the November quarter. The financing unit holds $10.3 billion in loan receivables. It issued $1.3 billion loans last quarter at an average FICO score of 707, an average loan-to-value ratio of 95.5% and an average loan term of 65.8 months.

CarMax achieved its remarkable success by trying to make the purchase of used cars as transparent, haggle-free and lemon-free as it can be. Each vehicle goes through a 125-point inspection regimen, surpassing any governmental requirement, and comes with a one-month warranty and a five-day money-back guarantee.

Competitors have begun to flatter CarMax with the sincerest form of praise. "Have you heard about AutoNation One Price?" America's top retailer of new and used vehicles (AN on the NYSE) asks visitors on its website. "It's one low price you can rely on. At AutoNation we believe the price you're quoted is the definitive price you pay for your pre-owned car. Period. No haggling. No facing the stress and pressure that often accompanies price negotiation."

Strong prices were a tonic for CarMax's revenue growth in the sweet phase of the cycle. From Feb. 28, 2009 to Nov. 30, 2015, the company's average CarMax selling price ticked up by 23.3%, or 3.2% per annum, to $20,094. Over those same six years and nine months, the CarMax top line swelled by 93.2%, or 10.2% per annum, to $3.5 billion.

That was then. In the 12 months ended Nov. 30, average selling prices didn't rise but fell, by 2.9%. Revenue increased but not by the accustomed double digits; the gain was rather 4.4%, to $3.7 billion. Prices continued to dwindle in December and January, according to Power.

To move the iron, CarMax is shouldering more credit risk. "In the latest quarter," Lorenz observes, "the company's finance sub facilitated 45% of purchases, as mentioned, up from 42.8% in fiscal 2016 and 29.7% in fiscal 2011. Delinquencies have so far shown no upside lurch: They amounted to 3.5% of total loans on Nov. 30, a slight absolute increase (though a 9.4 percentage-point increase) from the year-earlier reading of 3.2%. There is one notable side effect of the heightened intensity of company-furnished finance. Returns on capital have dipped to 4.6% in the November quarter, from 5% in fiscal 2016 and 9.2% in fiscal 2011."

CarMax elicits polarizing opinions from investors and lukewarm support from the Street. The stock trades at 21.1 times trailing earnings, but 11.3% of CarMax's equity float is sold short. Since Nov. 8, the shares have rocketed by 40% (perhaps investors are betting that a robust border-adjustment tax will drive up the price of new and used vehicles, though it is far from certain that such a tax would ever reach the president's desk.)

Of the 20 analysts with published ratings on the stock, 11 rate the company a buy, 7 a hold and two a sell. Insiders seem to have thrown their lot in with the shorts. In the past 12 months, they've sold a net 757,822 shares worth $44.4 million and there was only one buy: 1,000 shares on April 12, 2016 at a price of $51.78. The current share price: $68.25.

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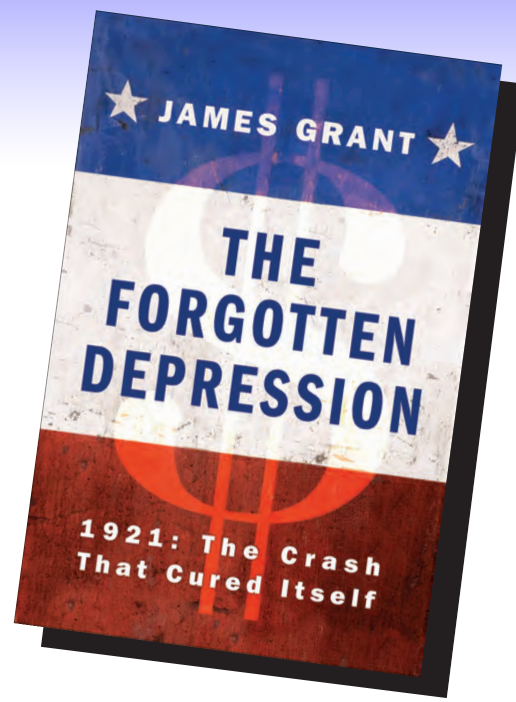

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