3-SIGMA VALUE

The Subprime Auto Bubble – Part 2

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In December 2015, 3-Sigma Value published *The Subprime Auto Bubble*, a report that questioned the durability of record U.S. auto sales[1]: *One of the few pillars of recent strength in the U.S. economy has been auto sales with 2015 setting up to be a record year. Most analysts expect 2015 sales to top the record of 17.35 million vehicles in 2000 (according to the U.S. Bureau of Economic Analysis). Unfortunately, much like the debt-fueled growth of the housing bubble, the driver of auto sales is a massive increase in debt, especially subprime debt.*

Behind the massive increase in debt is loosening credit standards that include a rapid expansion of low and no FICO score loans, the extension of durations, and loan-to-values (LTV) at absurd levels in excess of 200%. As the CFO of America's Car-Mart (CRMT) explained to me, "*Negative equity lending is destroying the industry*."

In this Part 2 report, we dive deeper into one subprime auto financier – **Credit Acceptance Corp (CACC),** exposing a matrix of accounting issues that call into question earnings quality and the stability of its overall business model.

CACC Capitalization as of 6/30/17	
Price as of 8/1/2017	$271.07
Shares Outstanding	19.5
Market Capitalization	5,276
Book Value (BV)	1,248
P/BV	**4.23x**
P/E - 2016A	16.6x
P/E - 2017 consensus	13.6x
P/E - 2016 consensus	12.6x

[1] Available at www.3sigmavalue.com.

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Credit Acceptance (CACC) was founded in 1972 by legendary used car salesman Don Foss who resigned as Chairman of the Board at the beginning of 2017. Since then, he and members of his family have been selling large quantities of stock (they used to own nearly half of CACC's market cap) and appear to be in the process of exiting entirely. We do not find the timing of Don's exit coincidental.

The first thing most analysts notice about CACC is its exuberant valuation (4.23x P/BV). However, an important rule at 3-Sigma Value is that **we never short valuation**. If valuation is a factor than it is the eighth factor out of eight; and that is how we treat it here. At the end of this analysis we will return to the simple fact that subprime lenders trade around or below 1x book value.

Factor #1 – CACC does not disclose any actual credit metrics – forcing investors to rely on internal projections as opposed to actual results of delinquencies and defaults.

CACC extends loans to over 7,000 independent dealers via two programs: the portfolio program and the purchase program. The portfolio program is what CACC is best known for, in which it advances money (the advance rate, equal to ~50% of the loan amount) to dealers in exchange for the right to service the loan. The advance is booked on the balance sheet as a loan receivable. CACC forecasts the amount it expects to collect on the loan (the forecasted collection rate, usually ~70%) based on their proprietary model. The difference between the forecasted collection rate (~70%) and the advance rate (~50%) is called the spread (~20%). The higher the spread the higher the profit.

The purchase program is similar to other traditional auto loan programs in which the dealer originates the loan and sells it for a one-time payment. The payment that CACC makes to a dealer in the purchase program is higher than the advance made in the portfolio program and thus the purchase program tends to be less profitable for CACC. Over the last two years, the percentage of loans going into the purchase program has nearly tripled, from 11.4% in the March 31, 2015 quarter to 32.2% in the March 31, 2017 quarter. Management is not entirely forthcoming when it comes to explaining this sudden mix shift to the purchase program, and we believe it's because the shift is unhealthy.

When management is asked why CACC does not disclose basic credit metrics (a question asked repeatedly on conference calls), they tend to get defensive and claim that it is easier for investors

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to focus on just two numbers: the advance rate and the collection rate. Not only is CACC's lack of disclosure highly unusual, it is unique in the universe of publicly-owned companies. There is no other financial services provider, let alone subprime auto lender, with such opaque credit reporting. The lack of transparency is a bright red flag.

Factor #2 – CACC inappropriately applies purchased credit impaired loan accounting, also known as level yield accounting (FAS ASC 310-30) rather than standard FAS 91 loan accounting. The result is a front-loading of earnings, and thus an overstatement of earnings as long as originations continue to grow.

To be accounted for under FAS ASC 310-30, two requirements are supposed to be met: (1) the loan must be transferred in its entirety; and (2) the deterioration in credit quality must occur subsequent to origination.

First, in the portfolio program, CACC acts as a servicer of the loan, splitting future payments with the originating dealer. Because the entire interest in future cash flows has not been sold by the dealer, completion of a transfer in its entirety has not occurred. Second, FAS ASC 310-30 is only appropriate for loans acquired with deterioration since the time of origination. Since CACC "buys" the dealer loan at the time of its origination, it is nonsensical to argue that subsequent credit deterioration has occurred.

Before Grant Thornton became CACC's auditor, Deloitte was terminated by the Company for raising these exact issues. Moreover, the SEC opined, according to CACC's 10-K, "*The SEC informed the Company that its method for recording loans should be changed from that of an originator of Consumer Loans to that of a servicer of loans generated by dealer-partners and a lender to those dealer-partners*."

In sum, rather than adhere to standard accounting used by every other lender, CACC chose to fire its auditor and continues to ignore the SEC.

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Factor #3 – CACC is under-reporting credit losses by transferring loans between loan programs without proper disclosure.

CACC requires dealers to group advances into pools of at least 100 loans. At the Dealer's option, a pool containing at least 100 loans can be closed and subsequent advances assigned to a new pool. All advances within a Dealer's pool are secured by the future collections on the related loans assigned to the pool. According to the Company, a profit-maximizing dealer will close a pool as soon as possible so it can begin earning its dealer holdback, and therefore dealers generally seek to close a pool after 100 loans. Moreover, loans can only be securitized when a pool is closed. This becomes an issue when a dealer fails to close a 100 loan pool and quits the program.

According to CACC's 10-K,

"The forecasted collection rates and advance rates presented for each Consumer Loan assignment year change over time due to the impact of transfers between Dealer and Purchased Loans. Under our Portfolio Program, certain events may result in Dealers forfeiting their rights to Dealer Holdback. We transfer the Dealer's Consumer Loans from the Dealer Loan portfolio to the Purchased Loan portfolio in the period this forfeiture occurs."

Over the past 5 years, ~20,000 dealers have signed up for CACC's partner program yet as of the end of 2016, only 7,000 remain. That means ~13,000 dealers churned. According to CACC Assistant Treasurer Jett Soutar, if a dealer "quits" the program before completing a pool of 100 loans then the loans transfer to the purchase program. Dealers churn either because they failed or because they found a cheaper source of financing elsewhere. Either way, it's not good for CACC. The loans that a churned dealer walks away from are clearly more likely to non-perform. Thus, CACC moves the loans from the partner program to the purchase program, in part to maintain the credit performance in the partner program required for securitizations. Since 2013, transfers from the portfolio program to the purchased program have exceeded write-offs and the process has accelerated. In effect, the purchased portfolio serves as a "bad bank" as CACC segregates non-performing loans from performing ones.

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Factor #4 – CACC is under-reporting credit losses by applying an absurd 120 month grace period to non-performing loans.

According to CACC's 10-K, "*We write off Dealer Loans once there are no forecasted future cash flows on any of the associated Consumer Loans, which generally occurs **120 months** after the last Consumer Loan assignment*."

The 120 month language was added in 2009 after the credit bubble burst.

When a loan is in default, CACC can recover and resell the vehicle while continuing to pursue a past due balance. As long as CACC self-determines the probability of future collection, that worthless loan can sit on its balance sheet for as long as 120 months. In the meantime, the vehicle can be resold again and again with new subprime loans attached to each sale.

Factor #5 – CACC's over-stated earnings mask a lending operation that generates no cash flow[2]. Cash flow from operations in 2015 was $404.2 million while cash flow from investing was -$639.5 million, leaving a deficit of -$235.3 million to be financed by cash flow from financing (borrowings). In 2016, the deficit expanded to -$428.3 million. CACC regularly reports net income in excess of cash flow.

CACC Financial Summary - Net Income versus Cash Flow

	2013	2014	2015	2016	1H 2017
Net Income	253.1	266.2	299.7	332.8	192.4
Net Cash Provided by Operating Activities	325.7	365.2	404.2	507.2	261.0
Net Cash Provided by Investing Activities	-333.6	-363.4	-639.5	-935.5	-534.7
Net Cash Provided by Financing Activities	3.1	0.4	235.2	436.6	286.3
Cash Flow	-4.8	2.2	-0.1	8.3	12.6

The cash flow deficit again expanded during the first half of 2017. I had an enlightening conversation with CACC Assistant Treasurer Jeff Soutar during which it was explained to me that as long as CACC is growing it will <u>not</u> generate any cash flow. He said that if advance rates

[2] Red Flag – CACC doesn't include a cash flow statement in its earnings press releases.

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were lowered then CACC could generate cash, with a breakeven in the 20%-30% range. But that means shrinking the core business and arresting growth.[3]

Growth is predicated on credit metrics that are unsustainable and accounting trickery that allows dead loans to rot on CACC's balance sheet for 10 years (120 months) without necessitating a write-off. The longest duration loan that CACC underwrites is 6 years yet CACC assumes collections in years 7 through 10. A model is only as good as the assumptions – a core belief at 3-Sigma Value that is clearly not shared by CACC management. CACC's collection rate will continue its decline as write-offs are more severe than expected. Not only that but bad loans dumped into the purchased portfolio must be written off. Earnings growth is a mirage.

When questioned about the difference between net income and cash flow, Mr. Soutar said that CACC could generate cash flow if it decided to stop growing its loan portfolio. In that situation, collections would continue while advances stop. However, that raises two issues; first, under FAS ASC 310-30, growth enables CACC to mask the reality that credit performance is worse than modeled and hence cumulative cash flow will not cover liabilities. And second, shrinking the business is not a strategy. Having to choose between growth and cash flow is a reflection of a flawed business model, one that is built on flimsy earnings as opposed to sturdy cash flow.

The critical factors driving the performance of CACC are as follows:

1. Loan growth – Base Case assumes a continuation of recent deceleration.
2. Advance rate – Base Case assumes a decline from high 40% to low 40% range.
3. Collection rate – Base Case assumes a decline from recent collection rate ~65%.
4. Average yield on loans receivable – Base Case assumes a decline from recent rate ~23%.
5. Allowance for loan losses – Base Case assumes an increasing ALL in connection with a decreasing collection rate.
6. Operating expenses – salaries and wages, sales and marketing, general and administrative – ranges around LQA/LTM[4].
7. Capital structure / interest expense – base case scenarios assume a static capital structure

[3] There are situations when growth precedes profitability, such as when companies are starting-up or early in their life cycle; however, CACC is no start-up.

[4] Last quarter annualized / latest twelve months.

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To create a range of plausible operating scenarios representing Upside (the risk), Downside (the reward), and Base cases (the most likely), we vary the critical factors and arrive at an unmistakable conclusion – CACC must generate an increasing amount of cash flow from financing (via borrowings – and/or shrinking the amount of secured financings) in order to generate cash. Earnings are misleading. Cash flow is what matters. And the difference here is striking.

CACC Financial Summary - Income and Cash Flow				
	2014	2015	2016	2017E
Revenues	723.5	825.3	969.2	1,099.7
Expenses	-302.6	-350.8	-438.0	-375.0
Pre-tax Income	420.9	474.5	531.2	724.7
Taxes	-154.7	-174.8	-198.4	-268.1
% Rate	36.8%	36.8%	37.3%	37.0%
Net Income	**266.2**	**299.7**	**332.8**	**456.5**
Cumulative Net Income			**898.7**	**1,355.2**
EPS	**11.92**	**14.28**	**16.31**	**19.40**
Consensus EPS				**19.90**
Net Income	266.2	299.7	332.8	456.5
+ D&A	13.2	14.2	15.3	16.7
+ Stock Comp	15.3	12.4	7.4	9.4
+ Provision for Credit Losses	12.8	41.5	90.2	100.3
- Purchase of Property and Equipment	-4.3	-4.0	-5.5	-9.9
- Purchases of Consumer Loans	-204.3	-371.9	-754.2	-970.1
+ Principal Collected on Loans Receivable	1,540.0	1,739.6	1,955.8	2,216.3
- Advances to Dealers	-1,471.4	-1,795.1	-1,881.3	-2,027.2
- Payments of Dealer Holdbacks	-135.5	-150.1	-142.0	-138.7
- Accelerated Payments of Dealer Holdbacks	-41.7	-52.6	-53.6	-48.0
= Cash Flow before Financing	**1.8**	**-235.3**	**-435.1**	**-543.4**
Cumulative Cash Flow before Financing			**-668.6**	**-1,212.0**
- Repayments of Secured Financings	-1,357.3	-1,101.4	-1,575.8	???
+ Proceeds from Secured Financings	1,754.7	1,247.0	2,169.3	???
+ Borrowings Under Revolving Secured Line	2,796.2	1,657.0	1,615.5	???
- Repayments Under Revolving Secured Line	-2,779.5	-1,718.8	-1,673.1	???
+/- Cash Flows from Financing	**0.4**	**235.2**	**436.7**	**543.7**
= Cash Flow	**2.2**	**-0.1**	**1.6**	**0.3**
Cumulative Cash Flow after Financing			**3.7**	**1.8**

CACC must generate over $543 million in 2017 from cash flows from financing in order to breakeven on a cash basis. In 2018, CACC will likely need an additional $700 million.

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Factor #6 – CACC depends on external sources of capital, capital that is fleeting. CACC appears broadly capitalized with a $310 million revolving credit facility[5], two issues of senior notes totaling $550 million, four warehouse facilities[6] with $625 million of borrowing capacity, and access to the ABS market where CACC has completed seven Term ABS financings totaling $2.7 billion; however, much of this capital is fleeting in a crisis. There will be a tipping point when warehouse credit lines are pulled, the ABS market freezes, and standards are reconsidered. Negative equity loans will be eliminated. Durations will mean revert. Credit scoring will be required.

Factor #7 – CACC's Board of Directors is in violation of Nasdaq listing requirements. According to Nasdaq, "*Audit committees are required to have a minimum of three members and be comprised only of Independent Directors.*" Meanwhile, there are only four people on CACC's Board of Directors – the CEO, CFO, and two gentlemen associated with CACC's largest and longest standing shareholder, Prescott General Partners. Prescott General Partners has been invested in CACC for over 20 years, and is sitting on a huge capital gain, rendering it undesirable to sell its stock unless it wants to pay a huge tax bill. With no independent voice on the Board of Directors, let alone on the Audit Committee, there is no catalyst for improving disclosures and adhering to accounting standards.

Factor #8 – 4x book value (BV) is an unsustainable valuation. Subprime finance companies trade around or below 1x BV.

Subprime Auto Lending

	ALLY	SC	CACC	CPSS	NICK	CRMT
Price at 8/1/17	22.77	12.89	271.07	4.02	8.86	39.40
Shares Outstanding	450	360	19	23	8	7
Market Cap	10,243	4,635	5,276	91	69	290
Book Value (BV)	13,473	5,679	1,248	193	110	237
per share	29.95	15.79	64.13	8.50	14.04	32.20
P/BV	**0.76x**	**0.82x**	**4.23x**	**0.47x**	**0.63x**	**1.22x**
2017E EPS - consensus	2.27	1.74	19.90	0.69	NA	3.07
P/E	10.0x	7.4x	13.6x	5.8x	NA	12.8x

5 Wells Fargo (WFC).

6 Wells Fargo (WFC), Bank of Montreal (BMO), Fifth-Third Bank (FITB), and Flagstar Bank (FBC).

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The inevitable compression of CACC's valuation premium is tied to the inevitable compression of CACC's earnings. CACC has been over-earning, and earning well in excess of non-existent cash flow. Ultimately, cash flow is what matters not earnings, and CACC is a company that generates no cash flow. Its valuation should reflect its reality. Target = 1x book value = $64.13.

Trading Considerations – CACC has 19.5 million shares outstanding but only 8.2 million of them float. 33% of shares are owned by insiders, and 11.5% by Prescott General Partners. Out of the 8.2 million shares that currently float, 4.1 million are already sold short (50%). CACC is actively traded (~200k shares per day), resulting in a short interest ratio (days-to-cover) that is elevated at ~20 days. In sum, a short of CACC does entail short squeeze risk, and therefore only experienced short sellers should engage.

Final Thoughts – as Warren Buffett famously said, "*Only when the tide goes out do you discover who's been swimming naked*." As long as credit conditions are loose and demand is strong, subprime auto lenders like CACC can over-earn. However, the tide is turning, and when that happens, swimmers start reaching for the cash in their pockets. It's only a matter of time until we see what CACC is wearing, if anything.

Lastly, for a humorous take on the subprime auto bubble please watch an August 14, 2016 segment on Last Week Tonight with John Oliver (on HBO) available on youtube at https://www.youtube.com/watch?v=4U2eDJnwz_s. After the reckoning, no one will say we didn't see it coming.

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