



Carvana Co. | NYSE: CVNA

INVESTMENT RESEARCH REPORT

"A Countrywide Auto Stock Promotion"

RECOMMENDATION: **Strong Sell**

| With Q4' 18 Update |

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Spruce Point's Activist Success Exposing Companies Hyped As Technology Disruptors

Spruce Point Capital Is A Globally Recognized Research Activist Investment Firm Founded In 2009

- Founded by Ben Axler, a former investment banker with 18 years experience on Wall Street
- Ranked the #1 Short-Seller by [Sumzero](#) after a study of 12,000 analyst recommendations dating to 2008 (March 2015)
- Ranked the #13 Most Influential FinTweeter on Twitter according to [Sentieo](#) (Dec 2016)

Spruce Point's Activist Successes With Over-Hyped "Technology" Companies

			
Report	May 2015 / June 2017	Sept 2016	May 2012
Enterprise Value	\$2.5 billion	\$1.1 billion	\$1.2 billion
Company Promotion / Situation Overview	Innovative robotics company capable of leveraging its success in robotics vacuums into other product categories such as telehealth, and lawn mower robots	Innovative technology disruptor in the third-party logistics space, hyping multiple iterations of its ETM and Optimizer technology, while quietly churning through five CTOs	Disruptive provider of social commerce solutions that help clients capture, display and analyze online word-of-mouth, including consumer-generated ratings and reviews
Our Criticism	Failures to innovate and repeated promises to diversify into other categories. Company is more a promotional vehicle for insiders to consistently sell stock at inflated multiples, while masking pressure through related distributor acquisitions	Management has a history of associating itself with companies that were touted as technology disruptors, but which ultimately fizzled out and had no lasting endurance. Notably: Groupon and Innerworkings, both which had earnings restatements	Our research revealed that BV's solution was nothing more than a money losing, rapidly commoditized service that would not scale. Its IPO prospectus was littered with social media buzz words at a time when Facebook was being taken public, and \$25 analyst price targets would prove unrealistic
Successful Outcome	iRobot's home vacuum market share has been significantly eroded by new entrants, forcing significant price compression. Its telehealth robots have failed to deliver any upside, while it finally just launched a lawn mower vacuum in Feb 2019 , yet has not been able to articulate the price or distribution strategy into the U.S.	In Q2'17 ECHO cut its FY17 revenue outlook and suspended longer-term guidance given changes in its end market and failure to hit synergy targets with Command. ECHO sell-side brokers downgraded their recommendations from Buy to Hold. ECHO's shares fell to a 52 week low of \$13, or nearly 50%	BV's CFO and CEO eventually resigned and its share price fizzled to low single digits before ultimately being acquired for just \$5.50/sh, 54% below its \$12 IPO price and 70% below our initiation price



Q4 2018 Update

Spruce Point Reiterates Downside Risk In CVNA, Cuts Price Target On Worsening Financial Performance

Spruce Point believes that the recent terrible financial results reported by Carvana continue to validate our concern about its uneconomic business model that isn't scaling, is capital destructive, and favors insider enrichment over shareholder wealth creation. Our revised price target is \$7.50 - \$19.60 (56% to 83%)

Recent Financial Results Disappointed For the Quarter And The 2019 Outlook

- Q4'18 Results Disappoint By A Mile:
 - **Retail Units:** 27,750 (vs Bloomberg cons 29,200, vs guidance 27,500 - 30,000)
 - **Reported Revenue:** \$535m v \$605m expected (original guidance: \$570m – \$630m)
 - **Total GPU:** \$2,131 ex gift (vs cons \$2,150. vs guidance \$2,000 - \$2,250 ex-gift)
 - **EBITDA:** **-\$63.2m** (vs cons **-\$56.2m**)
 - **Adj EPS:** Losses intensified to **-\$0.55** v **-\$0.49** expected
 - **Operating Cash Burn:** **-\$414.3m** for the year, up from **-\$199.9m** YoY (more than double the burn, with sales up 114%)
- FY 2019 Guidance Also Sorely Disappointed:
 - **Retail Units:** 160,000-165,000 (vs cons ~170,000)
 - **Total GPU:** \$2,450-\$2,650 (vs cons \$2,650)
 - **Revenue:** \$3.4bn-\$3.5bn (vs cons \$3.6bn)

Most Importantly: Carvana Suspended Giving Q1 2019 Guidance

- By reporting on Feb 27th, Carvana is already 2/3rds through the quarter and should be able to provide investors visibility into expected results
- Why can't it offer an outlook, and what, if anything, is the Company hiding?

Financing Needs Becoming More Obvious While Management Puts Self-Interest Ahead Of Investors

In Spruce Point's opinion, Carvana will require more equity capital to continue operations, and has limited flexibility to incur more debt given its deep junk CCC rating. Yet, despite the accelerating cash burn, management received a 100% increase in cash compensation at the approval of an "independent" Board, further compounding the pain to investors.

At The Current Burn Rate of \$1.1m/Day, Carvana Had Just 70 Days of Operating Cash On Hand At Yr End

- Current burn rate implies **\$414.4m of annual cash burn** over 365 days
- As of Q4, Unrestricted Cash Equivalents were \$78.8m as of 12/31/18
- We estimate **just \$12.8m of unrestricted cash on hand by March 1st**
- Other liquidity alternatives include going further into debt by tapping the floor plan facility and/or sale leaseback agreements with \$331m of capacity. However, this could be incrementally negative from a credit perspective
- We caution investors that Carvana's stated belief that it won't need to raise additional debt or equity appears aggressive. Importantly, management has a poor track record of hitting its stated financial targets.

With Increased Cash Burn, Disappointing Guidance, And A Suspension of Q1 Guidance, How Is Management Behaving?

- In our opinion, very poorly. We observe that **Carvana's Board granted management a nearly 100% base salary pay raises**
- *"The Board also approved annual base salary increases for the Company's executive officers as part of its annual performance review, including Ernie Garcia III, the Company's Chief Executive Officer, whose annual base salary was **increased from \$400,000 to \$885,000**, Mark Jenkins, the Company's Chief Financial Officer, whose annual base salary was **increased from \$375,000 to \$735,000**, and Benjamin Huston, the Company's Chief Operating Officer, whose annual base salary was **increased from \$375,000 to \$735,000**. The salary increase were approved retroactively to January 1, 2019, consistent with the Company's practices for annual merit increases."*
- We warned about the Board not appearing to be "independent" and not acting in the best interest of outside investors. We believe this validates our concerns.
- With profitability becoming more elusive and the cash burn accelerating, under no circumstances do we believe management deserves a 100% base pay raise
- If management were concerned about investors, it could have taken more stock in lieu of cash

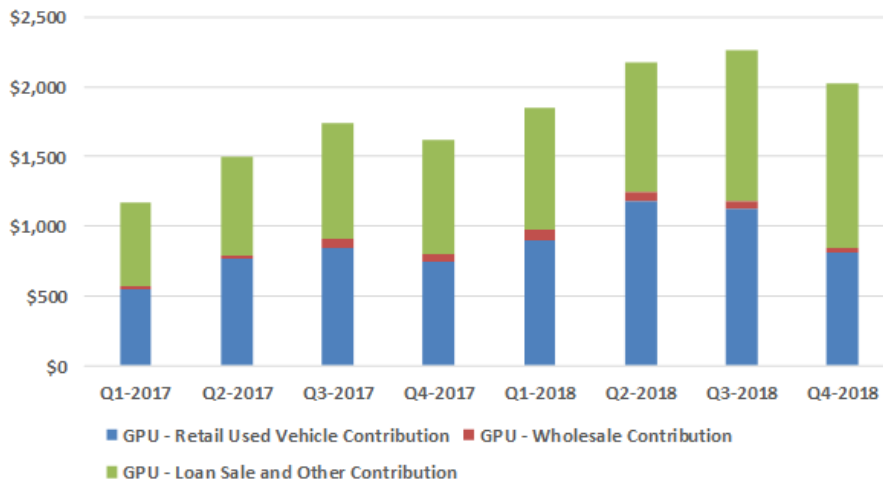
Low “Quality” GPU Concerns Intensify

Gross profit from retail used vehicle sales now contributes just ~40% of total GPU (on a common-weighted basis). This is as low as this metric has been since the Company went public. Retail sales have typically been responsible for closer to 50% of GPU.

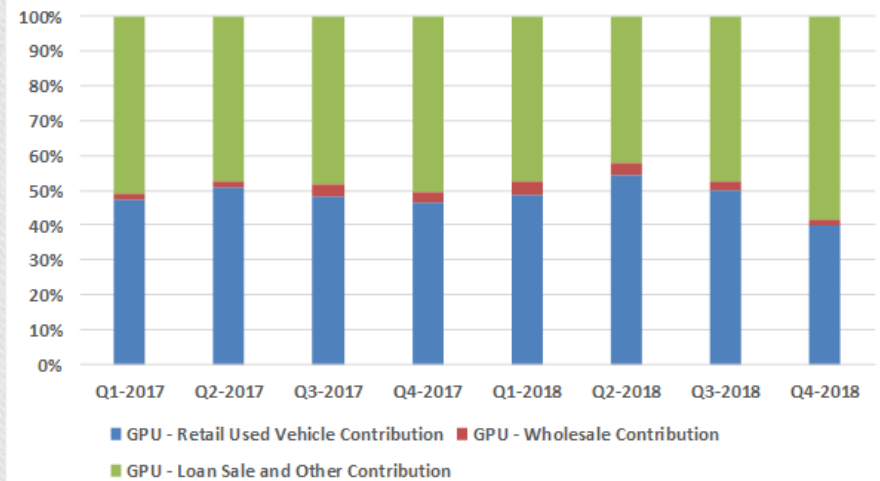
Meanwhile, loan sales and “other” was responsible for 58% of GPU, up from 48% in Q3. This is the highest this metric has been since the Company went public. Recall that this portion of Carvana’s gross profit represents its gain on the sale of what are largely subprime auto receivables. This questionable and perhaps unsustainable source of income is now responsible for a greater share of profit than it ever has been since Carvana went public.

Notably, Carvana’s gains on its refinancing maneuver (\$2.4M), together with its new and questionable VSC “excess reserve reimbursement” paid by DriveTime (\$1.9M), was responsible for 8% of GPU.

CVNA: Historical GPU Breakdown (Inc. Gift)



CVNA: Historical GPU Breakdown (Inc. Gift)



Spruce Point Is Not The Only Analyst To Issue Caution On Carvana

We applaud Morgan Stanley for being the most realistic analyst on the Street in reviewing Carvana:

Morgan Stanley: “4Q18 Review: Focus Shifts to the Potential Need for Capital & Potential for Insider Selling” – Downgrading To Price Target To \$21/share

- **Retail Unit Sales:** With 65% US population coverage adding another 22M POPs vs. our previous estimate for an additional 36M POPs (67.6% population coverage 160k - 165k. For 2023, we are lowering our estimate from ~440k to ~420k Retail Units Sold. This has ~\$1 negative impact to our price target)
- **Gross Profit Per Unit:** For 2019, we are modeling \$2,453 vs. management guidance for \$2,450 - \$2,650 vs. our previous estimate of \$2,410.
- **% Adjusted EBITDA:** For 2019, we are modeling -4.6% vs. management guidance for -3.5% to -5.5% vs. our previous estimate of -5.1%.
- **Free Cash Flow:** Free Cash Flow was -\$186M in 4Q18, or -\$339M after adjusting for the change in the Floor Plan Facility, putting the cash balance at \$79M. This compares to our previous estimate of -\$170M, or -\$109M after adjusting for the change in the Floor Plan Facility. We are now modeling positive free cash flow in 2024 vs. our previous estimate for positive free cash flow in 2023. This has ~\$1 negative impact to our price target
- **We reiterate our UW rating, and lower our price target from \$23 to \$21.** Our new price target of \$21 (vs. \$23 previously) is based on 12.0x 2023 EBITDA of \$398M (vs. 12.0x 2023 EBITDA of \$420M). The price target is ~\$1 lower due to retail unit sales and ~\$1 lower due to the cash balance. 12.0x 2023 EV / EBITDA is a discount to the historical multiple for KMX, the most direct comp for CVNA, but the approach is consistent with our Base Case / Price Target for KMX. We are constructive on CVNA's ability to disrupt the used car dealership model. However, we believe this potential upside is more than priced into the stock, and our 2023 EBITDA estimate is 50%+ below consensus, as the focus shifts from market expansion to market penetration. We believe that it will take longer for this business to scale than the Bulls think, and we are concerned about profitability in the meantime.

Analysts Quietly Cut Price Targets On Carvana: Now A Very Unfavorable Risk/Reward Proposition

Six Carvana analysts have cut their price targets – some in a very material way – since we published our initial report. Given the recent irrational move up in Carvana’s share price, there is currently only 15% upside to the average analyst price target, their bullish attitude towards the Company and its future notwithstanding.

This represents a weak risk/reward proposition to current and prospective Carvana shareholders.

Firm	Analyst	Industry Coverage Group	Recommendation	Price Target 2/12/19	Price Target 3/1/19
B. Riley FBR, Inc.	Sameet Sinha	Technology (Internet, SaaS, Cloud)	Buy	\$76.00	\$72.00 ↓
Wolfe Research	Chris Bottiglieri	Consumer Retail and Business Services	Outperform	73.00	65.00 ↓
Stephens Inc.	Rick Nelson	Retail/Hardlines	Equalweight	66.00	45.00 ↓
Baird	Colin Sebastian	Internet and Interactive Entertainment	Outperform	65.00	58.00 ↓
JMP Securities	Ronald Josey	Internet	Outperform	64.00	64.00
Barrington Research	Gary Prestopino	Business Services	Outperform	62.50	62.50
Wells Fargo Securities	Zachary Fadem	Retail/Hardlines	Outperform	57.00	57.00
Consumer Edge Research	Derek Glynn	Automotive, Consumer Transportation	Equalweight	55.00	52.00 ↓
Wedbush	Seth Basham	Hardlines Retail	Neutral	52.00	52.00
Craig-Hallum Capital	Steven Dyer	Industrial Technology	Hold	40.00	40.00
BMO Capital Markets	Daniel Salmon	Media & Internet	Market Perform	35.00	35.00
Morgan Stanley	Armintas Sinkevicius	Autos and Shared Mobility	Underweight	23.00	21.00 ↓
AVERAGE				\$55.70	\$51.95
UPSIDE				~75%	15%
Previous Price vs. Last				\$32.00	\$45.00

Spruce Point Sees ~55%-85% Downside In CVNA At The Very Minimum, And Potentially 100% Downside In An Extreme Bear-Case Scenario

Investors are taking a leap of faith in Carvana's full year 2019 outlook given that it cannot even provide short-term visibility into the business. Nonetheless, taking consensus revenues at face value, and applying a generous 0.5x to 1.0x multiple, we derive a price target of approximately \$7.50 to \$19.60 per share.

The largest drivers of our price target change are Carvana's reduced revenue outlook, significantly diminished unrestricted cash, and growing unrecorded tax receivable liability.

We continue to believe that Carvana could be a zero given its significant financing risk.

\$ in mm, except per share figures	Low Estimate	Midpoint	High Estimate	Note
EV/Sales Multiple	0.5x	0.75x	1.0x	CarMax at 1.3x and Truecar at 1.4x have proven business models with significantly better mgmt, governance, transparency, and lower business risk. CVNA should trade at a discount to them, closer to traditional brick-and-mortar auto dealers
2019E Consensus Sales % implied growth	\$3,525 80%	\$3,525 80%	\$3,525 80%	Down from \$3,600 and growth down from 83%
Enterprise Value	\$1,763	\$2,644	\$3,525	
Less: LT Debt (Incl. Leases)	(\$641)	(\$641)	(\$641)	Down from \$804m
Less: Unrecorded Tax Receivable Agreement	(\$69)	(\$111)	(\$111)	CVNA keeps this unrecorded liability off its balance sheet. Increased from \$69m
Plus: Cash and Equivalents	\$79	\$79	\$79	Down from \$440m
= Equity Value	\$1,090	\$1,971	\$2,852	
Diluted Shares Outstanding	145.5	145.5	145.5	
Per Share Value	\$7.49	\$13.55	\$19.60	Down from \$9.43 - \$21.84
Downside	-83%	-70%	-56%	Based on \$45 price vs \$32 previous



Executive Summary

Spruce Point Sees At Least 50%-70% Downside Risk In Carvana (NYSE: CVNA): \$9.60 - \$16.00 Per Share. In A Deeper Bear-Case Scenario, CVNA Is A Zero.

At best, Carvana (CVNA or “the Company”) is a used car dealership masquerading as a high-growth tech business. At worst, it’s an uneconomical subprime auto loan originator being supported by an unknown party willing to purchase subprime auto loans at vastly off-market rates. Its rapid growth has been built on smoke and mirrors, and it is inevitable that the force of financial gravity will bring it back to the ground.


Billing itself as the “Amazon of cars,” Carvana sells used vehicles through an e-commerce platform which allows customers to browse its inventory, obtain financing, and arrange for delivery / pickup from a home computer or smartphone. Management claims that the inherent scalability of its online-oriented model will support EBITDA margins more than twice those of peers – but, in reality, we believe the cost structure of the business is little different than that of a typical used auto dealer. Perhaps Carvana’s most unique characteristic as an auto dealer isn’t its e-commerce orientation, but the fact that it appears to make an attractive profit on the sale of subprime auto loans to financing partners about whom management has not been transparent. Without their provision of attractive financing on uneconomical terms, the economics of the business would collapse.



Carvana Is An Auto Dealer, Not An Asset-Light Tech Company: Management Is Forecasting Pie-In-The-Sky Margins And Market Share Gains On Unrealistic Scalability Assumptions While Accelerating Cash Burn To The Tune of ~\$350M/Yr




Growing Dependence On Debt Financing As A CCC+ Junk-Rated Borrower: Financing Needs Could Wipe Out The Company If The Credit Cycle Turns And Equity Investors Balk At Backstopping The Cash Bleed



Non-Transparent Subprime Auto Loan Financing On Non-Economic Terms: Purchases Of Subprime Auto Receivables At Grossly Off-Market Terms Necessary To Keep Carvana Afloat?



Dubious And Unsustainable Sources of Gross Profit Per Unit (GPU): Questionable Refinancing Agreements, Aggressive GAP Insurance Sales, And Warranties Which May Violate Consumer Protection Laws Expose Carvana To Loan Put-Back Risk



Unseasoned Management And Questionable Governance: CEO’s Father Convicted Of Felony Bank Fraud, A Woefully-Inexperienced C-Suite, A Treasurer Who Filed For Bankruptcy, And A Largely Non-Independent Board Of Directors



Absurd Valuation: An Overextended, Heavily-Indebted Used Car Dealer / Subprime Loan Originator Valued Like A High-Growth Tech Company, Largely By Mis-Assigned Tech Analysts. Shares Worth \$9.60 - \$16.00 In The Intermediate Term

Spruce Point Sees 50%-70% Downside In CVNA, And Up To 100% Downside In An Extreme Scenario

Carvana Is An Auto Dealer, Not An Asset-Light Tech Company – And Management Is Forecasting Pie-In-The-Sky Results On Unrealistic Scalability

- **A Used Car Dealer, Not A Tech Company:** Like any other large-scale used car dealer, Carvana buys used vehicles at auction and through trade-ins, reconditions them, maintains inventory, manages a logistics network, and arranges financing for customers. This is not an “asset-light,” highly-scalable internet business. A close look at its PP&E accounts show more money spent on physical assets than on technology.
- **Profitability Targets Are Overly-Ambitious:** Carvana is targeting medium-term EBITDA margins >2x those of other auto dealers on a below-average target Gross Profit Per Unit (GPU). This suggests that management sees tremendous operating leverage in the business, and that it expects to achieve SG&A efficiency >50% that of CarMax. Carvana’s business model is simply not sufficiently different from those of other auto dealers to support such an advantage in scalability. Any cost savings realized from a leaner on-the-ground sales force and smaller brick-and-mortar footprint will be offset by higher IT costs, call center costs, and logistics costs. Intense industry competition and lack of differentiation will undermine any attempts to achieve a materially above-average GPU, as management expects to achieve in the long-term.
- **Carvana Outgrowing Shared Service Agreements With DriveTime:** Carvana benefits from its special relationship with DriveTime, its former parent, through shared service agreements. As Carvana continues to outgrow its former parent, it will lose the advantage of access to these special arrangements which we believe are struck at a discount to market.

Questionable Accounting And Dubious Sources Of Gross Profit Per Unit (GPU)

- **Supporting Profitability With Dubious One-Offs And Other Items:** To address high employee turnover without taking a margin hit on higher compensation costs, CEO Garcia recently offered equity incentives from his personal holdings to employees who remain at Carvana for over a year. However, Carvana excludes these costs from adjusted earnings, though they are paid directly by the company first, and then reimbursed by Garcia. Management effectively sees this as a cost to Garcia, not to Carvana, despite the fact that it represents a real cost to the Company if it must increase pay to fight overwhelming employee churn. Meanwhile, it adds the “gift” back *above* the SG&A line, thereby inflating GPU.
- **100% Gross Margin Finance Revenue Driving GPU:** Carvana generates an outsized share (~50%) of GPU from 100% gross margin finance and insurance (F&I) sales, vs. <20% for KMX. Underlying GPU on car sales alone are >10% below industry average and less than half that of KMX.
- **Carvana A Loan Broker?:** A questionable refinancing maneuver supported ~7% higher GPU in Q3 FY 18. A similar transaction was completed in Dec 18. We question why the unknown party chose to pay Carvana a ~2% “brokerage” fee for a transaction in which it assumed zero risk. These gains merit scrutiny and conveniently allowed Carvana to hit its GPU target.
- **Questionable Vehicle Service Contract (VSC) Sales Contributing To GPU:** Carvana sells extended warranties and GAP waiver insurance, and generates income by selling the VSCs to a related party – perhaps at terms favorable to Carvana. We find evidence that Carvana does not inspect vehicles to standards to which it is obligated by law, and is not transparent with customers about the terms of its warranties. Liability reassignment in the event that consumer protection law violations are proven, could, as a tail risk, wipe out the Company.

Spruce Point Agrees With The Short Side Consensus, But Sees Even More To The Story

Questionable Uneconomical Financing Provided By Shrouded Financial Backers

- **Returns On Loan Sales Make Little Sense Given Credit Risk Distribution Of Borrowers:** Carvana is not transparent about the distribution of its borrowers' FICO scores. Based on our market intelligence, we believe management has made statements implying that it receives higher loan premiums on its sales of subprime auto loans than it receives on its sales of loans of superior quality to Ally Financial. How can this be? Ally recently cut its bulk financing commitment to Carvana, making us concerned that the Company will grow increasingly dependent on non-transparent borrowers which appear to be engaging in loan transactions at non-market rates.
- **Mystery Buyers Supporting Irrational Returns On Subprime Auto Loan Sales:** Management does not disclose the identities of the parties which appear to be purchasing Carvana's subprime auto loans at non-market premiums. Yet the trust which appears to be responsible for these purchases is becoming an increasingly vital source of financing for Carvana: with Ally beginning to cut back on its direct purchases of Carvana receivables, this trust is set to provide financing for more than half of Carvana's auto loan originations in 2019. We find the profitability of Carvana's auto loan sales perplexing given that peers – notably KMX – typically *pay* counterparties to assume their subprime auto loans. With this trust poised to become a majority backer of Carvana receivables, we call on management to provide more transparency into how the trust is financed, and to explain why the Company is capable of realizing vastly off-market prices on the sale of subprime auto loans.

Unfit Management Misrepresenting Its Biographies, Questionable Director And Auditor Independence, And Share Structure Favoring Insiders

- **A Dubious History:** Carvana was incubated by DriveTime, a subprime used auto dealer whose owner and chief executive, Earnest Garcia II, was convicted of felony bank fraud in 1990. The company has been losing money in recent years and replaced Garcia at CEO with Ray Fidel, another bank fraud felon convicted in a related case. DriveTime abandoned its IPO dreams in 2010, but set its sites on going public with Carvana soon thereafter. Garcia II later installed his son, Ernie Garcia III, as CEO of Carvana. Is Garcia II really the man in charge through super-voting Class B shares, and using Carvana as means to cash out in a way he couldn't through a DriveTime IPO? Furthermore, management omits from its bios a failed start-up called Looterang (Rewards Systems LLC), material to investors' ability to assess its history with start-ups.
- **Woefully-Lacking Management:** No Carvana c-suite executive has prior experience with a public company or in the auto industry (except for Garcia III, who worked for his father for a number of years). The CFO was most recently an economics professor, lacks a traditional CFO pedigree, and is supported by a treasury professional who filed for ch. 7 bankruptcy. While management's Stanford and Harvard pedigrees are superficially impressive, we prefer seasoned executives with prior auto industry experience for running a levered, money losing enterprise.
- **Board Of Directors Lacking Independence:** Of the three "independent" directors with prior auto industry experience, two have prior connections to DriveTime. Former U.S. Vice President and current board member Dan Quayle is claimed to be independent, but both Garcia II and his son have donated to Quayle and Quayle's son's political campaigns in the past. This calls his independence into question. Spruce Point is wary of companies which grant board seats to well-known and well-connected politicians with limited or no experience in the company's industry (e.g. Theranos, Kior, Waste Management and WorldCom).

Spruce Point Sees 50%-70% Downside In CVNA, And Up To 100% Downside In An Extreme Scenario

- Corporate Structure And Related-Party Deals Favoring Insiders: Class A shareholders hold just 5% of voting rights in Carvana. Class B shareholders control the remainder, with the Garcias' B shares controlling 90% of voting rights. B shares are fungible into A shares at a rate which gives the Garcias 70% economic control over the business. Insiders have been selling, and more than a dozen related-party deals with DriveTime and the Garcias could allow management to make out well financially even if Carvana ultimately wipes out shareholders.

Bull Market Economics: Eternally Bullish Analysts Embrace Carvana As A Tech Business, Not An Auto Dealer

- Tech Analysts Don't Evaluate The Business Critically Enough: Sell-side firms are inconsistent in their categorization of Carvana: some assign it to retail or auto analysts, but some assign it to tech / business services analysts. Tech analysts are less versed in the traditional auto dealer business model, and value it more like an asset-light e-commerce stock. Auto analysts tend to be overoptimistic about the stock as well, but are demonstrably less bullish on the name. At the end of the day, a spade is a spade, and bull market economics can mask the inevitable reality that Carvana is a business burning >\$350m per year for only so long.... In the mean time, analysts are adamant that Carvana is a roaring "Buy" and see 75% upside to \$55.70 per share.
- Carvana Trades Like An Asset-Light Tech Business: Carvana is trading close to 1.5x 2019E EV/Sales on the belief that 83% YoY growth will shrink its EBTIDA losses from -\$189m to -\$86m. Yet, not only are we skeptical of Carvana's ability to achieve its lofty sales expectations, but we also believe that losses will continue and be higher than expected. Carvana's multiple is greater than that of best-of-breed auto dealer CarMax. It is also richer than that of TrueCar, a profitable asset-light auto marketer that assumes neither car inventory risk nor subprime financing risk. Carvana should trade at discount to these peers to reflect its higher business risk and its lower quality management and governance. If valued at 0.5x to 0.75x NTM revenue, shares in Carvana would be fairly priced at approximately \$9.60 to \$16.00, implying 50%-70% downside risk.
- Carvana's Dependence On Financing And Operational Missteps Could Make It A Time Bomb Waiting To Go To Zero: Carvana's recent practices relating to VSC sales and vehicle inspection practices may be in violation of consumer protection laws. Given that Carvana sells finance receivables to third-parties with specific representations, Carvana could be forced to repurchase its auto loans. In a worst case scenario, this could trigger hundreds of millions of dollars of forced loan repurchases and cause a liquidity crunch. Carvana's debt is rated at junk levels (CCC+, paying 8.875%), which gives it limited financial flexibility to navigate adverse scenarios caused by an economic recession, deficient regulatory business practices, or otherwise. The Company's significant reliance on outside financing to support its loan originations, in addition to its significant capital needs as it grows its inventory and logistics footprint, could make it a zero if the credit cycle were to turn, and should shareholders fail to backstop further equity raises.

Perception Versus Reality: Where Spruce Point Differs From The Street

Topic	Popular View	Spruce Point's View
Business Model	Carvana is the “Amazon of used cars.” It’s a tech business that happens to be in the business of selling cars.	Carvana is a used car dealer that, like others in the industry, also focuses on online-based sales. It is not an asset-light tech firm, but a car dealer requiring significant capital to support growth and loan origination.
Scalability	Carvana doesn’t require the personnel or physical footprint of a traditional auto dealer. Its scalability will drive EBITDA margins double those of peers.	Carvana’s requires investment in inventory, physical space, and people, just like any auto dealer. Any advantages in spending needs for on-site sales force, brick-and-mortar retail space, etc. will be offset by outsized IT spending and call center workforce.
Sustainability and Quality of Profit Sources	As good as any auto dealer, and capable of delivering materially lower car prices and superior service to customers.	No pricing advantage per a recent price study and customer service strains. Dependence on questionable high-margin finance-based sources of profit (subprime loan originations, refinancing “brokerage”), and deals with associated parties at perhaps off-market rates.
Access to Capital	Will grow fast enough to justify heavy losses and borrowing.	CCC+ Junk-rated even during sanguine credit cycle introduces risk of lost access to capital if cycle turns. Dependence on uneconomical loan sales for significant share of profits – will this be sustainable as Carvana grows?
Blue Chip Billionaire Investors	Ernest Garcia II (DriveTime) Tom Dundon (Santander/Carolina Hurricanes owner), Mark Walter (Guggenheim CEO)	Who wouldn’t want to follow successful billionaires into an investment? Unfortunately, some are already cashing out, and in the case of Garcia, he can still milk Carvana through related-party deals, while equity holders get wiped out.
Executive Team	Hot-shot Stanford and Harvard Ivy Leaguers with histories of managing successful tech startups.	Young, inexperienced management with no experience with public companies, almost no auto industry experience, and hiding a failed business venture in its past. CEO Garcia III appears to have been appointed his by father Garcia II (a felonious bank fraudster).
Board of Directors	Solid, independent directors with industry experience.	Most board members are not truly independent due to past connections with DriveTime. Dan Quayle brings name recognition, but he and his son have received political donations from management.
Valuation	Covered in part by sell-side tech analysts that see 75% upside to \$55.70 per share. A high-flying, disruptive tech company deserves a tech-like valuation: 3x FY EV/Sales.	Carvana is an auto dealer which should be valued in-line with other auto dealers: 0.5x FY EV/Sales and at best 0.75x (note: industry blue chip Carmax is at 1.3x). In an extreme bear-case scenario, Carvana’s heavy losses, growing debt and loan sales dependencies could render it a zero if credit markets dry up.

A Well-Known Fundamental Short, But There's More To The Story

Spruce Point acknowledges that Carvana has been cited as a short, mostly for the fundamental challenges facing the Company. We also acknowledge that some elements of Carvana's questionable financing have been identified by the market. However, we find new evidence that its subprime auto loan sales are highly uneconomical, yet at the same time more critical to the business' sustainability than is generally recognized. We also shine new light on the tail risks created by its heavy reliance on finance income and credit.

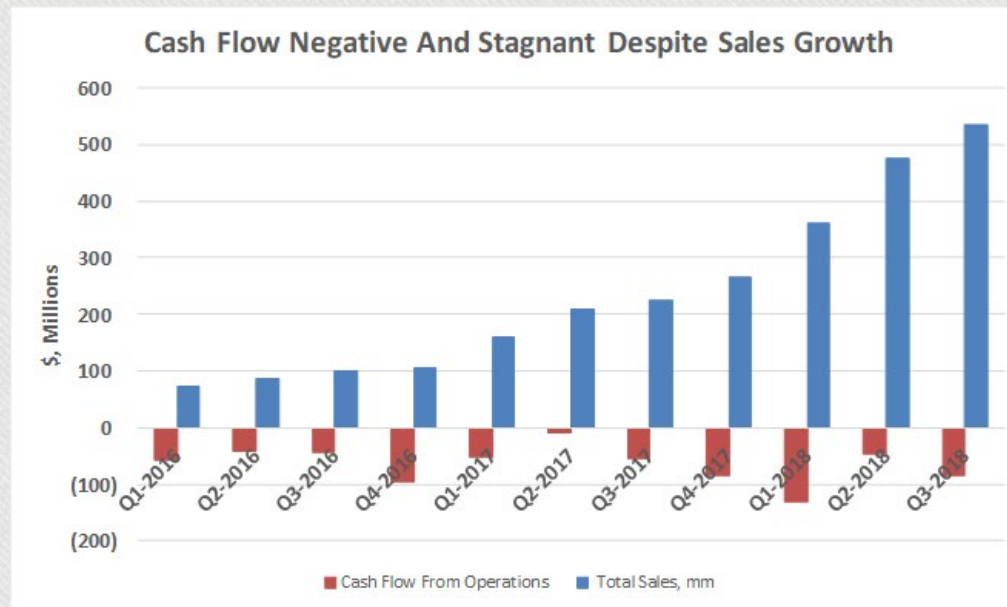
Dimension of Concern To The Carvana Bull Case

	Doubts Over Tech-Like Scalability	Doubts Over Growth Runway	Execution Concerns	VSC Contracts – Gross Profit Support And Legal Concerns	Leverage, Funding Needs, and Credit Risk	Exposure To Subprime Auto Lending Market	Irrational Financial Support From Shrouded Backers	Growing Reliance on Doubtful Finance Income For GPU	Strength Of Executive Team And Accuracy of Bios	Independ. Board of Directors	Valuation Absurdity	Tail Risk: Potential Zero Due To Loan Repo Funding Needs
Seeking Alpha Reports	X	X	X		X	X	X		X		X	
The Capital Forum			X	X								
Morgan Stanley	X	X			X	X						
Bloomberg Intelligence	X	X	X		X	X					X	
Spruce Point	X	X	X	X	X	X	X	X	X	X	X	X

Burning Cash With No End In Sight: When Does The Music Stop On Easy Credit?

Amidst one of the most sanguine credit markets in recent history, Carvana debt is rated CCC+ and pays 8.875%. It has burned \$350M in cash through the last twelve months (\$475m after capex), and has made no material progress towards turning cash flow positive even as quarterly sales have grown more than 5x since Q4 FY16. Even optimistic sell-side analysts do not expect the Company to generate positive cash flow until the early-to-mid 2020s at the earliest. The business also took on another \$340M in Q3 FY18 on top of its existing \$350M floor plan facility ([due to expire in 2020](#)) and remaining long-term debt of ~\$100M.

With the Company so heavily dependent on financing to support its continued growth, a turn in the credit cycle and growing concerns regarding subprime lending could effectively shut Carvana out from credit markets. In an extreme bear-case scenario in which Carvana is unable to finance future capital needs, we believe that Carvana would be a zero.



Why does management refer to Carvana as a “tech company”? Maybe because tech companies can get away with generating negative earnings and blowing cash as long as the market continues to believe the pie-in-the-sky growth story...

...but unlike nimbler, asset-light software companies, Carvana is a massive used auto dealer and subprime loan origination operation with tremendous funding needs. Trying to finance this business' way to profitability is like trying to turn the Titanic, while taking on tremendous risk in the interim.

How This Goes To Zero

Spruce Point believes that, with such heavy capital needs, and with so many things that can go wrong, Carvana can be deemed a zero without much imagination.

Topic	How This Goes To Zero
Dependence On Unknown Parties For Profitable Sale Of Subprime Auto Loans	<ul style="list-style-type: none"> • Carvana appears to be selling subprime auto loans at vastly off-market rates to unknown buyers. A vital source of profit for the Company may disappear without counterparties' continued ability and willingness to buy loans at unheard-of premiums. • Should these parties, without a known rationale for supporting Carvana, choose to withdraw their support – or lack the capacity to support a larger Carvana – the Company may lack necessary funding to persist as a viable business
Dependence On Credit	<ul style="list-style-type: none"> • If the credit cycle turns, auto loan delinquencies rise, and financing becomes harder to obtain, Carvana could experience serious funding issues as a CCC+ rated subprime auto dealer • There is already evidence that Ally is cutting back. Tim Russi, a key supporter of DriveTime/Carvana at Ally, recently left the company.
Business Practices Come Under Greater Scrutiny	<ul style="list-style-type: none"> • Consumer protection investigations into Carvana's inspection and repair practices, or warranty transparency (e.g. CFPB already fined DriveTime \$8m in 2014) • Investigation into unlicensed sale of GAP waiver coverage • Violation of consumer protection or other laws triggers loan reassignment / put-back risk to CVNA • Associated parties no longer large enough to support growing VSC commissions
Management / Board / Employee Turnover	<ul style="list-style-type: none"> • Departures of Board members deemed "independent" or managers in key roles (e.g. Moorehead – Director of Finance, Accounting and Tax just quietly left in Oct 2018) • Employee turnover increases as rank/file demand higher wages and no longer accept stock grants from management
Equity Investors Lose Faith	<ul style="list-style-type: none"> • Investors grow tired of continuing to prop up the stock on the expectation that the Company will scale and generate positive profits one day. They balk at backstopping additional cash burn. • Rotation investor base from momentum / tech investors to more traditional auto investors triggers selling

Capital Structure And Valuation

Spruce Point believes that Carvana is another absurd technology “growth” story that trades on investors’ perception that heavy losses today will translate into magic profits tomorrow, even though after six years since its founding, profits and cash flow remain elusive. Now encumbered with \$350m of expensive 8.875% CCC+ rated debt, and with loan financing partner Ally appearing to distance itself, Carvana investors may start to take repeated earnings disappointments more seriously. Anchoring Carvana’s valuation closer to the reality that traditional (money-making) auto dealers receive at best 1x and generally 0.50x revenue multiples would result in 50% - 70% downside risk.

\$ in millions, except per share figures

	Spruce		Consensus	Street Valuation		
	Street	Point	Estimates (FY Dec 31)	2018E	2019E	2020E
Stock Price	\$31.98	\$31.98	EV / Sales	2.7x	1.5x	1.0x
Series A Outstanding	38.8	38.8	EV / EBITDA	NM	NM	50.2x
Convertible Preferred to Class A	--	1.3	Price / EPS	NM	NM	NM
Series B Outstanding	105.2	105.2	Price / FCF	NM	NM	NM
Total Dil. Shares Outstanding	144.1	145.3	Price / Book Value	67.0x	NM	NM
Market Capitalization	\$4,607.2	\$4,647.8				
8.875% Unsecured Notes due 2023	350.0	350.0	Growth and Margins	2018E	2019E	2020E
Floor Plan Facility: 3.4% due 2020	349.4	349.4	Sales Growth	130.3%	82.5%	48.4%
Note Payable: 5.9%, due 2-5yrs	34.8	34.8	Gross Margin	10.3%	12.8%	14.2%
Finance Leases due 15-20yrs	66.6	66.6	GPU	\$2,153	\$2,645	--
Capital Leases: 5.2%	3.4	3.4	EBITDA Margin	-9.6%	-2.4%	2.0%
Plus: Total Debt Outstanding	\$804.2	\$804.2				
Plus: Tax Receivable Agreement	--	69.0	Leverage	2018E	2019E	2020E
Plus: Non-Controlling Interests	197.7	197.7	Total Debt / EBITDA	NM	NM	7.6x
Less: Cash and Equivalents	439.8	439.8	S&P Rating	CCC+/Stable		
Adj. Enterprise Value	\$5,169.3	\$5,278.9	Moody's	Caa2/Stable		

Source: Carvana, Spruce Point and Bloomberg and market consensus



An Auto Dealer Dressed Up As A Tech Company

Woefully Inexperienced C-Suite

Carvana is emblematic of today's bull market business environment, where Stanford and Harvard pedigreed individuals with no auto industry experience, can manage a public company that burns >\$350m per year, yet attain a \$5bn enterprise value. CFO Mark Jenkins was recently an economics professor, and had no prior public company work experience in finance, accounting, or treasury, which are traditional breeding grounds for public company CFOs. He is supported in the treasury function by an individual who filed for personal bankruptcy, calling into question his suitability to manage financial affairs for a public company.

Spruce Point does not believe management is well-suited to run a large, capital-intensive public company in the auto industry.

Executive / Role / Education	Age	Concern	C-Suite Experience?	Mgmt. Experience Outside of Family Business?	Mgmt. Experience Outside of Start-Ups?	Experience in Auto Industry?	Experience With Public Company?	Direct Corporate Finance Experience?
Ernie Garcia III / CEO / Stanford	35	Son of a felon, possibly installed as figurehead by father			X	X		X
Mark Jenkins / CFO / Stanford	39	Non-traditional CFO						
Joel Lewison / Treasury (1)	NA	Filed for personal bankruptcy, 6 years with DriveTime				X		X
Benjamin Huston / COO / Harvard / Stanford	35		X	X				X
Ryan Keeton / CBO / Harvard	40							
Daniel Gill / CPO / Stanford	35		X	X				X
Paul Breaux / GC	34							

Source: Carvana and Spruce Point opinion

1) Lewison filed for Ch 7 bankruptcy in the [US Bankruptcy Court, District of Arizona](#). According to his bio and DriveTime, he was a [Senior Treasury Analyst](#) and [Assistant Director](#)



Why Do Key Carvana Executives Hide Their Past Start-Up Failure At Looterang?

In Spruce Point's opinion, Carvana's CEO and CFO have misrepresented their public biographies as stated in SEC filings. We find irrefutable evidence that Garcia III and Jenkins co-founded and owned Rewards Systems LLC ([dba Looterang](#)). The entity is still listed as "Active" according to the Arizona corporate registry.¹ Given that Looterang appears to be a failed start-up, it should be disclosed and material to investors so that they can accurately judge management's suitability for running a fledgling enterprise.

Interestingly, Ben Huston, Looterang's designated CEO, does disclose Looterang in his professional history (unlike Garcia III and Jenkins, it was his only professional activity at the time). If Looterang was sufficiently established as a business for Huston to list it in his background, why do Garcia III and Jenkins fail to list it in their own?

Garcia III and Jenkins were both owners of Rewards Systems LLC (Looterang) Yet Conceal It From Their SEC Bios

Executive Officers and Directors

Ernie Garcia, III co-founded Carvana and has served as our President and Chief Executive Officer since our inception in 2012. Mr. Garcia is also Chairman of the Carvana Co. Board. Prior to founding Carvana, Mr. Garcia held various roles at the DriveTime Automotive Group, Inc. from January 2007 to January 2013. From January 2007 to December 2008, he served as a financial strategist. He was a managing director of corporate finance from December 2008 to November 2009. From November 2009 until January 2013, he served as a Vice President and Treasurer and Director of Quantitative Analytics. As Director of Quantitative Analytics, Mr. Garcia was responsible for the firm's ongoing development of consumer credit scoring models, and its utilization of those tools in retail vehicle sales deal structuring and vehicle price optimization. Prior to DriveTime, Mr. Garcia was an associate in the Principal Transactions Group at RBS Greenwich Capital from 2005 to 2006, where he focused on consumer credit based investments. Mr. Garcia holds a B.S. in Management Science and Engineering from Stanford University. We believe that Mr. Garcia is qualified to serve on our Board because of his extensive knowledge of our business and strategy, as well as his experience in the automotive retail industry and leadership role with us.

Mark Jenkins has served as our Chief Financial Officer since July 2014. Prior to joining Carvana, Mr. Jenkins was a professor in the finance department at The Wharton School of the University of Pennsylvania, where his teaching and research focused on consumer and corporate credit markets from 2009 to 2014. While at Wharton, Mr. Jenkins was responsible for teaching courses in the undergraduate, MBA, and executive education programs on corporate restructuring, corporate credit and leveraged finance. Prior to his time at Wharton, Mr. Jenkins worked at The Brattle Group from 2001 to 2004, an economic consulting firm, where he focused on corporate valuation and demand forecasting in technology markets. Mr. Jenkins received a Ph.D. in economics from Stanford University and a B.S.E. from Duke University in Mathematics and Civil Engineering.

Ben Huston co-founded Carvana and has served as our Chief Operating Officer since our inception in 2012. Prior to joining Carvana, Mr. Huston co-founded Looterang, a card-linking platform that enabled personalized deals to be automatically administered through consumer credit or debit cards, in 2011. Mr. Huston was chief executive officer of Looterang from 2011-2012. From 2008 to 2011, Mr. Huston served as an associate at Latham and Watkins, a full service global law firm, where he focused on regulatory affairs. Mr. Huston holds a J.D. from Harvard Law School and a B.A. in American Studies from Stanford University.

Ryan Keeton co-founded Carvana and has served as our Chief Brand Officer since our inception in 2012. Prior to joining Carvana, Mr. Keeton was a principal at the Montero Group, a strategic consultancy firm, from 2010 to 2012, where he advised global public and private companies on strategic and business

Source: [Carvana SEC filings](#)

Stage	Full Product Ready
Industry	Internet / Web Services
Location	Scottsdale, AZ, USA
Currency	USD
Founded	April 2011
Employees	10
Website	looterang.com

Company Summary

Looterang offers a personalized alternative for local deals and recommendations. Our model combines consumer transaction histories with rich venue data, washes those data sets with proprietary predictive algorithms to generate personalized offers and recommendations, and then delivers them via mobile apps using real-time variables. This approach offers three key benefits: deep personalization, convenient implementation, and enhanced search.

Team

- Ben Huston**
Co-Founder/CEO
Ben oversees the company's operations and is a proven leader and project manager. Prior to founding Looterang, he worked with emerging companies as a lawyer at Latham and Watkins, and received a J.D. from Harvard Law School and B.A. from Stanford.
- Ernie Garcia**
Co-Founder
Ernie has extensive experience leading data-driven development in a practical setting at DriveTime Automotive Group, an innovative retail lending company where he founded the Quantitative Solutions Group. He has a B.S.E. in Management Science & Engineering from Stanford.
- Mark Jenkins**
Chief Scientist
Mark leads the analytical effort. Mark is an Assistant Professor of Finance at The Wharton School, where his research focuses on developing econometric methods for modeling consumer behavior. He has a Ph.D. in Economics from Stanford.

Source: [Gust.com](#)



Carvana: A Brief History

The history of Carvana can be traced to Ugly Duckling, a rental car company based in Tuscon. When the company went bankrupt in 1989, Ernest Garcia II – [previously convicted of bank fraud](#) – bought up the assets and transformed the business into a used car dealer focused on subprime customers, becoming one of the first to engage in loan securitization. The company later rebranded as DriveTime in 2002 upon going private. Garcia first founded Carvana in 2012 as a captive ecommerce platform for DriveTime's used car sales, but later spun out the Company, installing his son as CEO.

DriveTime:

An IPO That Wasn't Sexy Enough To Sell With Convicted Felons
Garcia II and Ray Fidel
([Withdrawn Feb 2010](#))

Carvana:

A Sexy New "Tech" Used Car Dealer
With Stanford and Harvard Grads Wall Street Buys Hook Line and Sinker
([IPO April 2017](#))



While Carvana presents itself as a tech-forward ecommerce business, it's important to bear in mind that it is ultimately a used car dealer. Like any other used car dealer, it buys vehicles from auction and trade-ins, reconditions them, and maintains significant inventory. Though Carvana's distribution model is somewhat different, the economics of the business are, at their core, the same as any other used car dealer.



Does This Look Like A Tech Company To You?

As much as Carvana bulls wants you to believe that it's a high-flying, asset-light, highly-scalable "fintech" business, make no mistake: this is a used car dealer. The emphasis may be on the online experience, but, like any other dealership, Carvana requires significant inventory, a sales force, and a network of physical locations – and a much more involved logistics network to boot.

	September 30, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 439,794	\$ 172,680
Restricted cash	18,471	14,443
Accounts receivable, net	23,498	14,105
Finance receivables held for sale, net	88,151	45,564
Vehicle inventory	339,005	227,446
Other current assets	26,446	15,480
Total current assets	935,365	489,718
Property and equipment, net	251,942	148,681
Intangible assets, net	9,243	—
Goodwill	9,353	—
Other assets	6,200	2,738
Total assets	\$ 1,212,103	\$ 641,137

Significant investment in vehicle inventory

Significant fixed assets

Source: [CVNA Q3 FY 2018 10-Q](#)

NOTE 3 — PROPERTY AND EQUIPMENT, NET

The following table summarizes property and equipment, net as of September 30, 2018 and December 31, 2017 (in thousands):

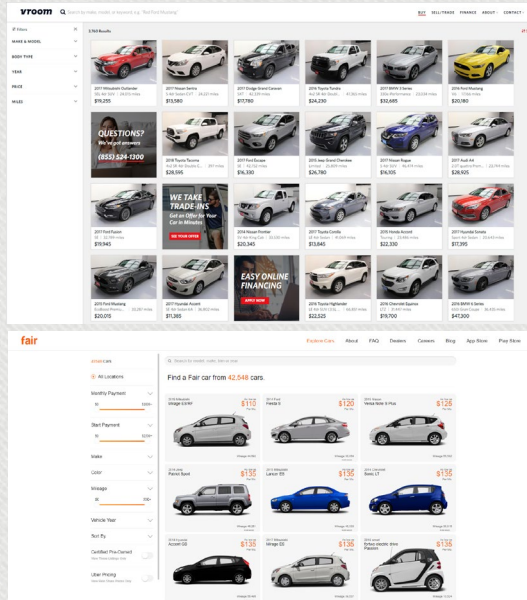
	September 30, 2018	December 31, 2017
Land and site improvements	\$ 44,042	\$ 11,656
Buildings and improvements	108,116	60,804
Transportation fleet	52,742	39,153
Software	32,335	21,009
Furniture, fixtures and equipment	18,005	12,239
Total property and equipment excluding construction in progress	255,240	144,861
Less: accumulated depreciation and amortization on property and equipment	(36,836)	(20,453)
Property and equipment excluding construction in progress, net	218,404	124,408
Construction in progress	33,538	24,273
Property and equipment, net	\$ 251,942	\$ 148,681

Relatively sizable investment in tangible assets compared to software investment



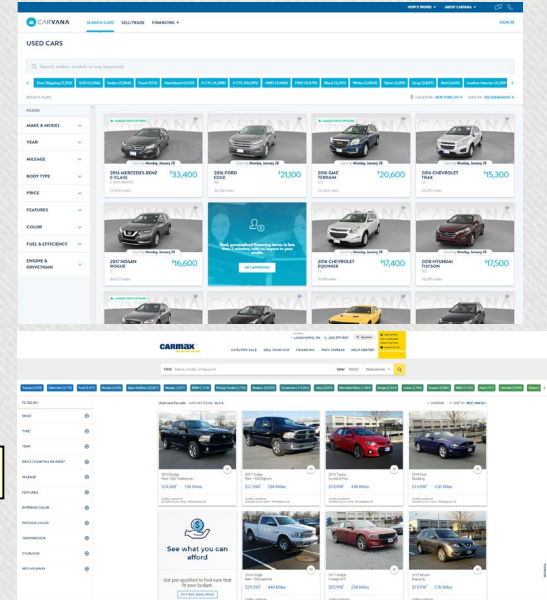
Carvana pitches itself as a “fundamentally better solution to car buying” ([Q3 FY 2018 earnings call](#)), as though it were the only internet-based platform for buying (used) cars. In our opinion, there is nothing unique about Carvana’s services. Countless companies – from large, national e-commerce sites to smaller local dealerships – give consumers the ability to shop for cars online (on eerily similar platforms no less). While not all offer Carvana’s full suite of services – from online buying to online financing and delivery to the customer’s door – a growing number of dealers do in fact provide everything Carvana has to offer.

Vroom



Fair

Carvana



CarMax

Platform	New And Used Cars	Online Search	National	Pre-Apply For Financing Online	Complete Financing Process Online	Home Delivery
eBay Motors	X	X	X			
Cars.com	X	X	X			
TrueCar	X	X	X	(via OpenRoad)		
AutoNation	X	X	X	X		(Regional)
Shift		X		X	X	X
Vroom		X	X	X	X	X
Fair		X	X	X	X	X
CarMax	X	X	X	X	X	(Regional)
Carvana		X	X	X	X	X

We've Seen This Movie Before. It Didn't End Well.

Just as Carvana was getting off the ground floor in the early 2010s, competitor Beepi was also taking off. While designed as a peer-to-peer used car marketplace, Beepi gave sellers a guaranteed price for their cars, and purchased their cars if it couldn't find a buyer within 30 days. Accordingly, Beepi, like Carvana, assumed significant inventory risk. Beepi inevitably folded in 2017, struggling to find investors to support its high startup costs.¹ While Carvana has since achieved much greater scale, Beepi's fate should be taken as a reminder to investors that the economics of used car buying ultimately prevail in Carvana's business: building an online used auto dealer still requires significant investment in inventory, logistics, inspection and repair capabilities, and most other areas of cost involved in selling used vehicles.

Beepi



Look familiar?

Carvana



In a way, however, the business of users cars is as old as cars itself, and it seems that what Beepi was doing was not as defensible as it hoped it would be. Other dealers soon also began offering the same perks, but with a far smaller cost base, since they would already have established, more localised businesses.

[Source](#)

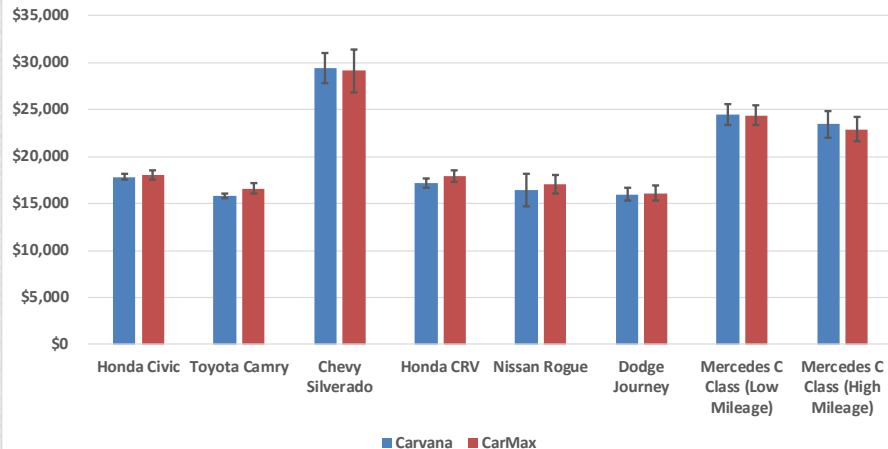
Being a superficial “tech business” does not insulate Carvana from the harsh economics of the used car industry.

No Price Advantage To Carvana

Carvana claims to cut overhead out of the standard used car dealership cost structure by saving money on salesmen, land, etc. Does this translate into lower prices to the customer? Our analysis demonstrates that vehicle prices at Carvana are not materially lower than CarMax's used car prices. While the Company previously offered promotional incentives through its referral program, giving referrers \$100 in cash and referees \$500 off a car, it has since swapped out this program for a less-generous offer which provides the referrer only with credit towards a future car. Carvana's lower ASP is perhaps attributable to its history of promotional activity. However, even with a referral code, there is no discernable or consistent price advantage to shopping through Carvana.

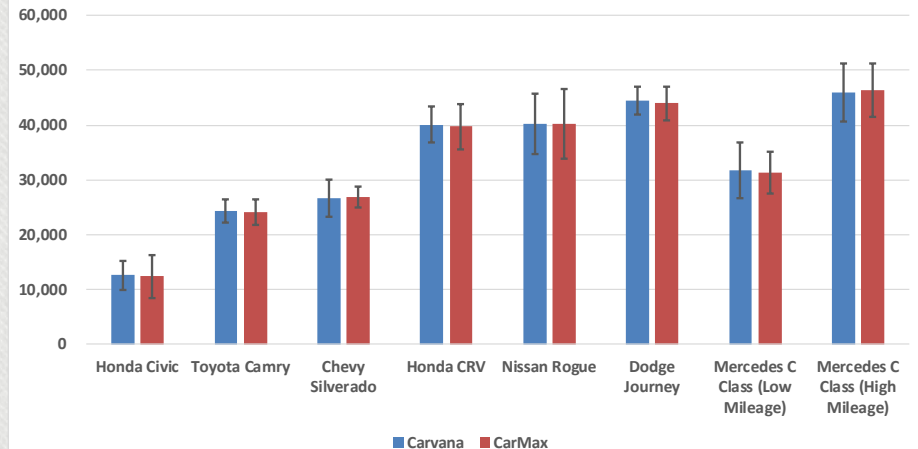
Average Pricing Difference: 1.5%

Price Comparison: Carvana vs. CarMax



Average Mileage Difference: -0.6%

Mileage Comparison: Carvana vs. CarMax



Note: Error bars represent one standard deviation above and below average price / mileage

Across a selection of popular models, Carvana cars are 1.5% more expensive than CarMax cars on average, and have 0.6% less mileage than CarMax cars on average.

Given the dispersion in both price and mileage across each model, there is no discernable cost advantage to shopping at either Carvana or CarMax.



Carvana Is A Used Car Dealership, Not A Tech Company

Carvana uses carefully-crafted, promotional language to manage its perception among customers and investors. It refers to itself not as a used car dealer, but as an “eCommerce platform for buying used cars” (see its most recent [10-K](#)). Its physical locations are not “dealerships,” but “vending machines.” And, of course, Carvana is “the Amazon of used cars.”

Management’s language is designed to dress up Carvana as an innovative tech company “disrupting” the used car space rather than a boring, capital-intensive used car dealer. This marketing has worn off on the investor community: not only do retail investors frequently discuss Carvana as a tech company, but the Company is generally covered by sell-side technology analysts at investment banks (see [later slides](#)). However, at its core, Carvana is little different than any other used car dealer and the economics are effectively the same, as we cover through the next several slides.

Carvana: The Amazon Of Car Buying?

Jul. 13, 2018 5:12 AM ET | 18 comments | About: Carvana Co. (CVNA)

✓ This article is exclusive for subscribers.

Summary

- The company is doing a make-over of the used car market, with an interesting business model.
- The model has substantial leverage built in, some of which is already appearing even if the company is still in the hyper-growth build-out phase.

[Source](#)

Carvana Delivers A Stable IPO

Sep. 1, 2017 3:33 PM ET | 4 comments | About: Carvana Co. (CVNA)

✓ This article is exclusive for subscribers.

Phoenix-based Carvana was founded by Ryan Keeton and Ernie Garcia in January 2013 as an online option for used car sales. Carvana offers a unique and convenient way of buying used cars. Its platform allows users to research and identify a vehicle, use its proprietary 360-degree vehicle imaging technology to inspect the vehicle, arrange for financing and warranty options, and finally, purchase the vehicle and schedule delivery or pickup from its web-page or mobile app. Carvana's process allows the entire effort to be completed in as little as 10 minutes. Other online used car websites act as marketplaces by connecting buyers with sellers. Carvana's process covers the entire car buying process.

[Source](#)

Ryan Keeton of Carvana: Using Amazon's Playbook, Car Vending Machine to Disrupt Used Car Industry

Mar 11, 2016 by Brent Leary In Interviews 2

Ryan Keeton: Carvana, we like to say, it's Amazon for autos. We believe we're an alternative to the traditional way that folks buy a car these days. A lot of consumers are out there spending a lot of time online, researching vehicles, finding the right car that's for them, but ultimately all of those channels push a consumer to the dealership to consummate that transaction.

[Source](#)

Giant Vending Machine Wants to Make Buying a Used Car in Philly Fun

The innovation eats a large coin then spits out a vehicle. Here's why the company behind the structure is so excited to finally open it in Philly on Thursday.

[Source](#)

On my commute I pass a new glass tower right off I-270, around Shady Grove Road. Do you have any idea what it is?

— Chris Cochran, Gaithersburg, Md.

It is most definitely not a used-car dealership. That's because Carvana — a company that sells, um, used cars — says it is trying to shatter that model.

[Source](#)



[Source](#)

Why does Carvana get to pitch itself as a high-flying technology business when so many other used car dealers offer the same services?



How Much More Runway Is There For Market Penetration?

Carvana opened in 41 new markets in FY 18, slightly beating its announced guidance of 30-40 per its [Q4 FY 17 shareholder letter](#). But what is the significance of “opening a new market” when Carvana also ships out of market? Carvana defines its markets as the locations in which it offers free delivery (vs. a shipping fee of roughly \$100-\$500 for out-of-market delivery, depending on location). Yet we note that Carvana appears to charge the same delivery fee to customers within its markets if the car has to be shipped in from another location, even if reasonably closeby. Carvana also offers to [reimburse airfare up to \\$200 to out-of-market customers who fly in](#) to pick up their car at their nearest vending machine.

Question About Shipping Charges (self:carvana)

submitted 8 months ago by JizNIE

I have noticed that there are several cars, on the site, that have posted shipping charges, ranging from \$199 to \$299. I thought shipping was free. Is this some new Carvana policy sneaking in to change the experience, or is there something so special about these vehicles that they rate these additional charges. Also, would these be the maximum charges for people who do not live within 100 miles from a Carvana vending machine?

Look at this link, to see what I mean.

[https://www.carvana.com/search?](https://www.carvana.com/search?SortBy=MostPopular&bodyStyle=9&price.min=0&price.max=15000&year.min=2016&year.max=2017&models=bbbabcgPfeeEGbFFbDg3bgfp&page=1)

[SortBy=MostPopular&bodyStyle=9&price.min=0&price.max=15000&year.min=2016&year.max=2017&models=bbbabcgPfeeEGbFFbDg3bgfp&page=1](https://www.carvana.com/search?SortBy=MostPopular&bodyStyle=9&price.min=0&price.max=15000&year.min=2016&year.max=2017&models=bbbabcgPfeeEGbFFbDg3bgfp&page=1)

5 comments share save hide report

[-] tunningha1 1 point 8 months ago

It's because of the distance the car is from you. I had to pay \$200 to have a car shipped from Arizona to Michigan. I'm not sure how far it has to be before you get charged for shipping, but that's what a rep told me.

permalink embed save

[-] JizNIE [S] 1 point 8 months ago

I would almost accept that explanation, except that when I purchased my car, from carvana I paid almost \$500, and it was only from New Jersey, which is about 300 miles from me. Additionally, the car that I purchased was listed as free shipping. I read the terms, understanding that I lived more than a hundred miles away from a vending machine. My daughter's car, which was in Texas, when she purchased it cost the same as mine, to deliver. There are no vending machines within a hundred miles of me, now, so that explanation doesn't work.

permalink embed save parent

[Source](#)

Price changing, hiding numbers, 40+ emails and still messed up (self:carvana)

submitted 10 months ago by smlr

My first purchase attempt with Carvana and what a mess.

So I went to purchase a car about 10 days ago, started the process and decided to hold off. The LOCK expired on the car. Came back about 3 days ago and saw the car was still available but the price had been reduced \$1200. I was all in. So I went to my checkout and previous purchase order was still tagged to me with the old price still.

Attempted CHAT, about 40+ emails so far to get them to correct the pricing. Reducing the sticker price by \$1,200 as it was now listed. Still going back and forth with them. Sales tax is 6% but they are attempting to charge me more than that. Said they are checking on that. Then in the last round they just added \$199 TRANSIT FEE. Now this fee never appeared previously, never appeared in their previous attempts to adjust the price seems they are attempting to make up some lost cash here.

What I am asking if posters could tell me:

1. DID you pay a Transit Fee (not delivery fee) but a TRANSIT FEE to bring the car to your market (I'm in a major market)
2. Did you have issues with them over taxing?

Anything else I should be worried about, seems they are no better than a dealership. I have my financing thru a 3rd party so not reliant on these guys whatsoever - may just go to the local dealership and work a deal this week if they can't act straight.

Look forward to some feedback here.

5 comments share save hide report

[Source](#)

2 out of 2 people found this review helpful



Customer service questionable

By Lynn T., Brentwood, TN, Jan 27, 2019 • [Verified Reviewer](#)

First, I visited with Nashville Carvana just to learn about the process and get more comfortable with this new process. They were polite and knowledgeable. Days later I found a 2018 Rav4 online that I wanted to buy. I was previously told at my Nashville visit and calls to customer service that there were no delivery or transportation charges when I made a purchase.

When I started the purchase, a \$199 charge for transportation was added. This was a (Carfax) Florida car and I live in Nashville and Carvana has a location in Georgia. So why did you add this \$199 transportation charge? All the other Rav4 cars were listed with no transportation charges coming from the same area.

When I inquired, Customer service said it was because it had to travel 2,000 miles from New Jersey. WHAT?

I ask Nashville Carvana and they had no idea why the charge was made.

Also, It took about 6 hours of calls and holds and return calls to get a hold of anyone in customer service.

I know they will return your money before the seventh day, but not getting the truth on the front end makes me walk away. I told the Nashville office I would take the car if they would remove the \$199 transportation charge from Florida. They told me to call customer service again...I just said no thank you and left. I will buy somewhere else, these people are not consistent.

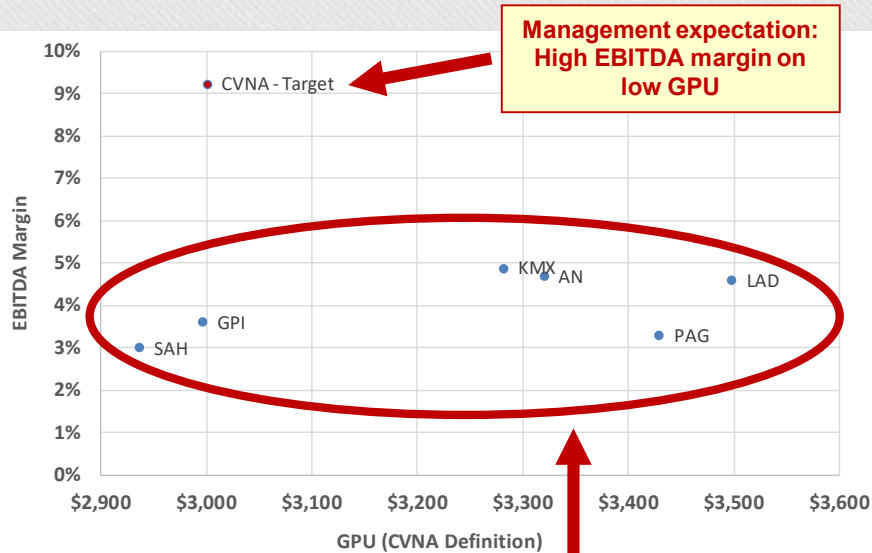
Bottom Line: No, I would not recommend this to a friend

[Source](#)

By defining its market presence as the area within which it offers free delivery – even when in-market deliveries still require a fee in many cases, when it still offers delivery outside of its “markets,” and when it reimburses out-of-market customers to fly in – we question the significance of “entering a new market” with respect to Carvana’s growth trajectory. **We believe that Carvana’s true coverage is effectively greater than the numbers cited by management (55.8% of the US population, per its [most recent shareholder letter](#)), and therefore that its runway for ongoing market penetration is not as robust as characterized by management.**

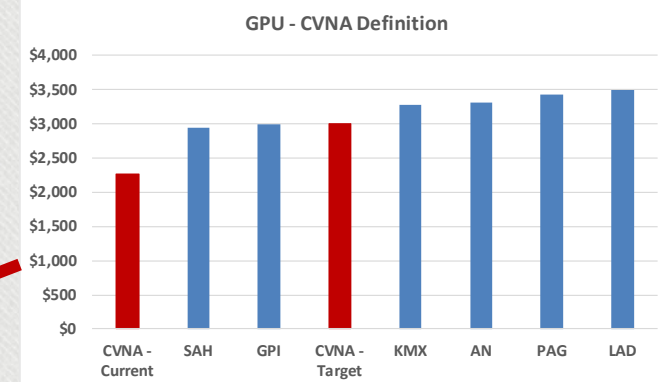
Management Expecting Tremendous Leverage To Support Margins Completely Outside Industry Orbit

Investors like Carvana's apparent tech orientation not just for superficial reasons: the consensus is that Carvana, much like other tech companies, is highly scalable. Indeed, Carvana is keen on stressing its operating leverage to investors: because it doesn't rely on brick-and-mortar locations or a traditional sales force, operating margins will supposedly expand rapidly with continued sales growth, and should be materially higher than peers once the Company is mature. Specifically, despite a current GPU just 2/3 that of CarMax and other new-and-used car dealers, and a targeted "mid-term" GPU 10% below the industry average, management is targeting "mid-term" EBITDA margins of 7%-11.5%, versus CarMax's FY18 EBITDA margin of 8% and the industry average of just ~4%. Is there really enough leverage built into the business to support this kind of EBITDA margin expansion?

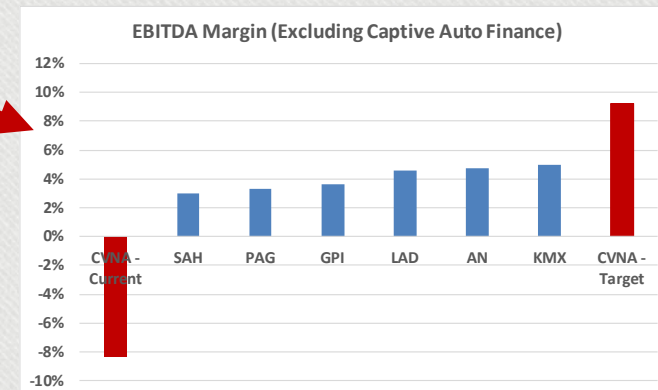


Note: EBITDA and GPU excludes income from captive auto finance businesses where applicable (e.g. KMX excludes CAF)

Excluding CAF income for KMX, no auto dealer demonstrates EBITDA margins even half of Carvana's long-term target, even with GPUs up to 15% higher than Carvana's target GPU



Management is expecting to achieve tremendous efficiencies to reach EBITDA margins >2x the industry average on below-average GPU



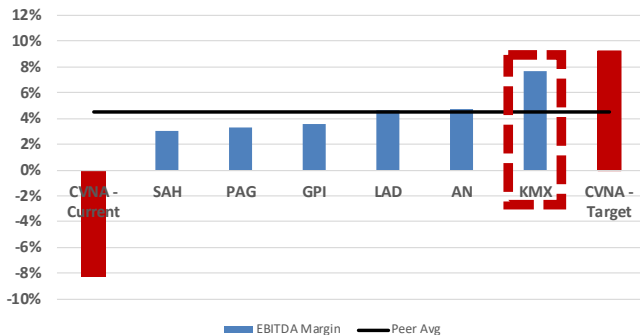
Carvana envisions achieving the highest EBITDA margin of any publicly-listed car dealer – more than doubling the industry average outside of CarMax – while maintaining an only average-at-best GPU. To reach this level of profitability, the Company would have to demonstrate tremendous leverage.



Apples To Oranges: Carvana Management Wants To Have Its Cake And Eat It Too

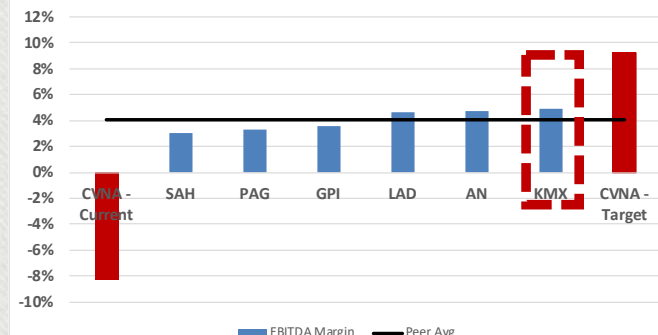
Part of the driver behind management's envisioned GPU expansion is its insistence that CarMax is a good comparison case. All-in, CarMax generates GPU of \$3,914 and EBITDA margins of 7.7% as of Q3 FY19, implying significantly higher upside to Carvana profitability than the industry average GPU of ~\$3,230 and EBITDA margin of ~4%. However, 16% of its all-in GPU is driven by income from CarMax Auto Finance (CAF), CarMax's captive auto finance arm. As Carvana sells 100% of the loans that it originates, it wouldn't be appropriate to compare Carvana GPU or EBITDA to CarMax profitability measures which include the impact of CAF. Adjusting company-wide profit for CAF puts CarMax Q3 GPU at \$3,281 and EBITDA margins at 4.9%, far more similar to the rest of the auto dealer universe. Carvana's upside should be measured against this standard, not against a standard which includes the impact of a business line in which it does not participate.

EBITDA Margin (Including Captive Auto Finance)

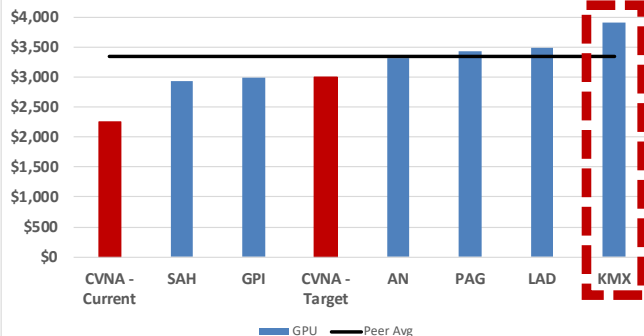


Comp KMX falls from
7.7% to 4.9%

EBITDA Margin (Excluding Captive Auto Finance)

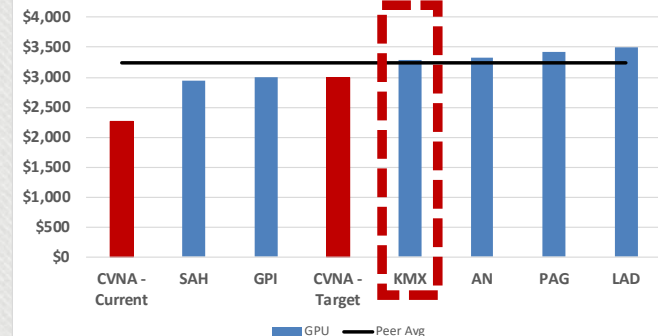


GPU, Captive Finance Included



Comp KMX falls from
\$3,914 to \$3,281

GPU, Captive Finance Excluded



Adjusting KMX profitability for CAF income, Carvana's potential upside appears much more modest.

Under What Cost Structure Could Carvana Possibly Achieve Its Target EBITDA Margins?

With a used retail vehicle GPU of \$3,000 on a run-rate used retail vehicle ASP of \$20,000, EBITDA margins of 9.3% (the midpoint of management's target mid-term range) would imply SG&A of \$1,340 per used retail vehicle ex-depreciation, 47% less than CarMax (ex-CAF). If, as a more mature business, Carvana's per-vehicle advertising costs are equivalent to those of CarMax (since this isn't part of the business model's supposed scalability), all other SG&A per used retail vehicle would stand at \$1,121, less than half that of CarMax (ex-CAF). In other words, Carvana management is suggesting that, as a more mature business, labor costs, occupancy costs, non-COGS logistics costs, IT costs, and all other costs will be less than half those of CarMax. How likely is this cost superiority?

Cost Structure – Per Vehicle Basis

(\$, except percentages)	KMX	CVNA (As Of Q3 FY 18: \$2,263 GPU, -9.8% Adj. EBITDA Margin)			% Difference vs. KMX		
		Low-End Target	Target Midpoint	High-End Target	Min	Midpoint	Max
Used Vehicle (Retail) ASP	\$20,000	\$20,000	\$20,000	\$20,000	-	-	-
GPU (Ex-CAF for KMX): (A)	\$3,281	\$3,000	\$3,000	\$3,000	-	-	-
EBITDA Margin (Ex-CAF for KMX)	4.9%	7.0%	9.3%	11.5%	-	-	-
EBITDA per Used Vehicle (Retail): (B)	\$980	\$1,400	\$1,860	\$2,300	-43%	90%	135%
D&A as a % of Retail + Finance & Insurance Sales (Run-Rate)	1.2%	1.0%	1.0%	1.0%	-	-	-
D&A per Used (Retail) Vehicle (Run-Rate): (C)	\$240	\$200	\$200	\$200	-17%	-17%	-17%
EBIT per Used (Retail) Vehicle (Run-Rate): ((B) - (C)) = (D)	\$740	\$1,200	\$1,660	\$2,100	62%	124%	184%
SG&A (Ex-D&A) per Used (Retail) Vehicle (Run-Rate): ((A) - (D))	\$2,541	\$1,800	\$1,340	\$900	-29%	-47%	-65%
Advertising Expense per Used (Retail) Vehicle	\$219	\$219	\$219	\$219	-	-	-
SG&A Ex-Advertising per Used (Retail) Vehicle	\$2,322	\$1,581	\$1,121	\$681	-32%	-52%	-71%

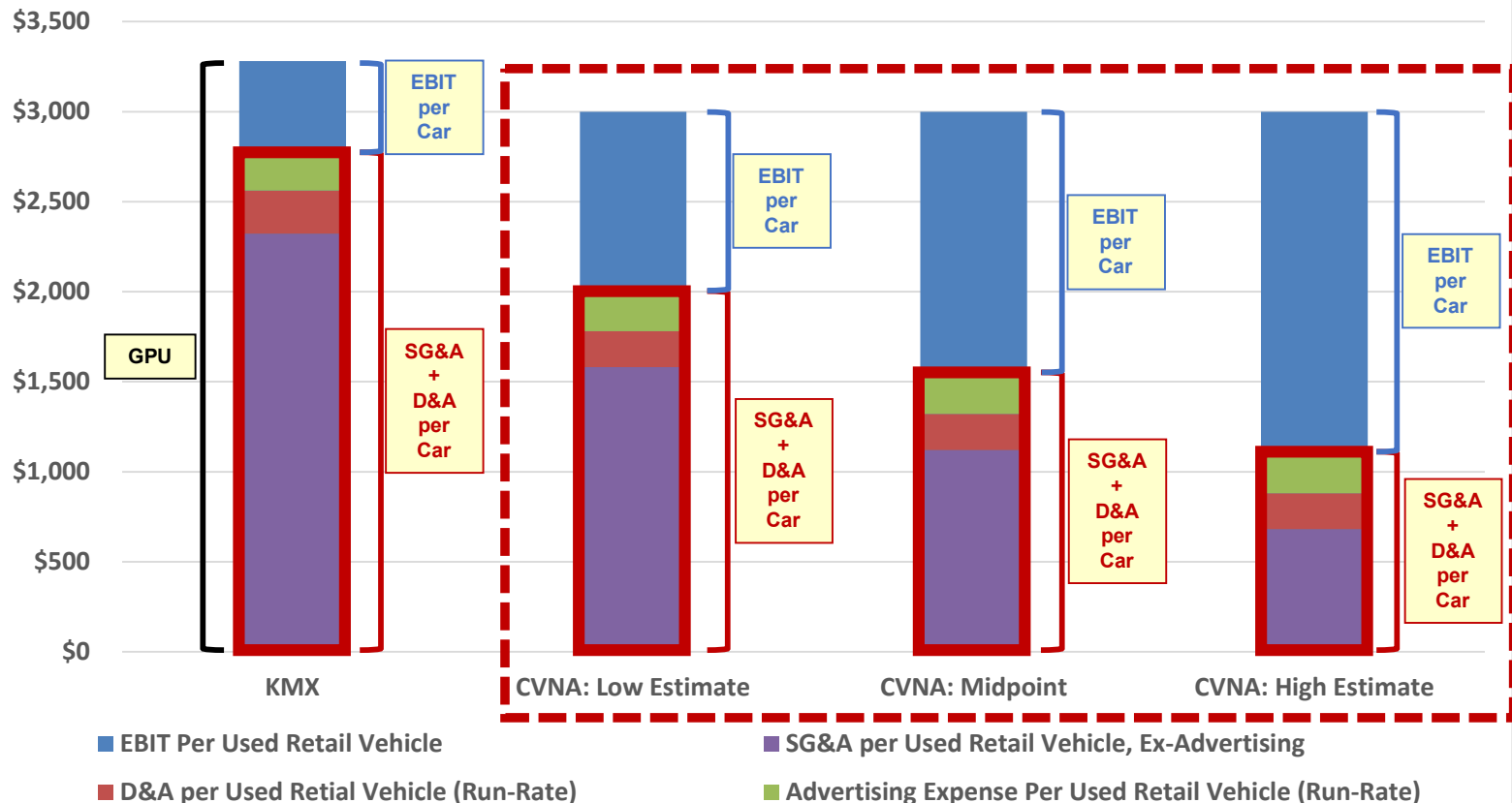
To achieve management's high-end EBITDA margin target on a GPU of \$3,000, Carvana would have to maintain SG&A (ex-advertising) less than 1/3 that of CarMax. How plausible is this?

CarMax's Cost Structure vs. Carvana's Proposed Cost Structure, Visualized

Carvana management believes that it will blow the competition out of the water on operational efficiency, and that SG&A per vehicle will be just a fraction that of peers.

Is Carvana's business model really so radically different that it can take out more than half of all SG&A (ex-advertising) from the standard used auto dealer cost structure?

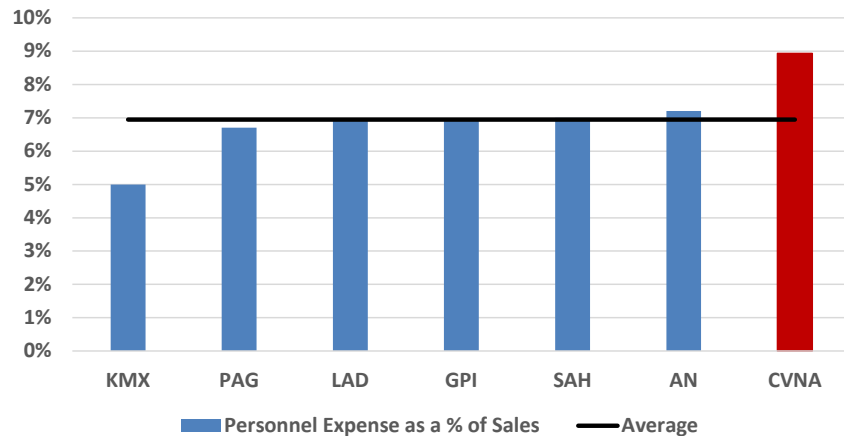
Cost Structure: KMX vs. CVNA Medium-Term Targets (Per Management)



Sales Require Customer Service, Whether On The Ground Or Remote

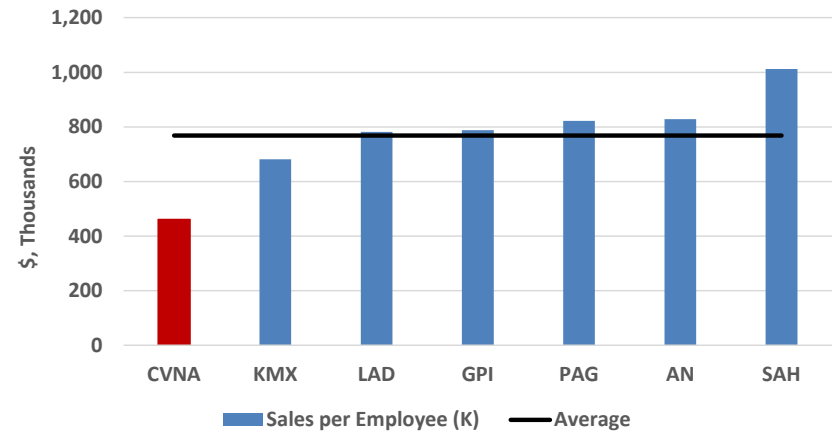
Management suggests – and bulls assume – that Carvana does not require as large a workforce as a traditional auto dealer, which must maintain a relatively dense network of retail locations each staffed with a full roster of salesmen. Yet Carvana must still maintain a sizable staff of customer service representatives to provide assistance to customers via phone – and this on top of its on-the-ground workforce which, while perhaps deemphasized, cannot be eliminated completely. It also requires a much larger IT team than do other auto dealers whose online sales channel is limited or nonexistent. While the Company is not yet mature, we observe that, unless it can grow sales more than twice as fast as it grows its workforce, Carvana will prove to be more labor-intensive than traditional auto dealers. We do not believe that bulls fully appreciate Carvana’s labor needs, and give it too much credit for workforce cost leverage going forward.

Personnel Expense as a % of Sales



Note: Includes Stock-Based Compensation

Sales per Employee



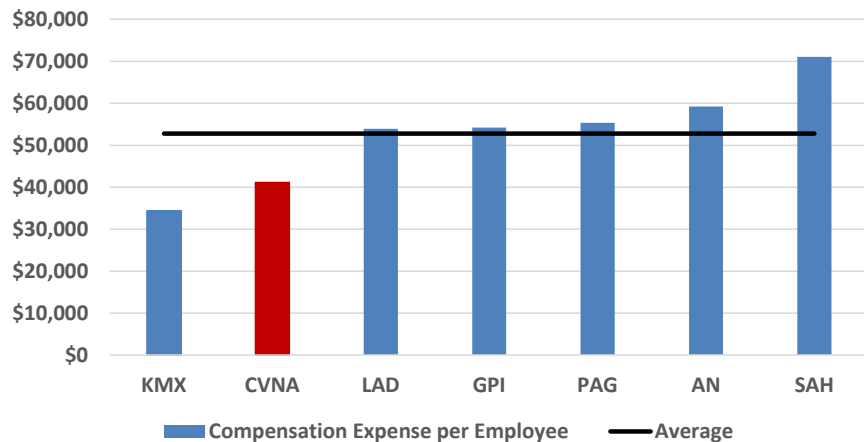
Carvana generates only about half the industry average sales per employee, yet its aggregate compensation expense as a percentage of sales is over 33% higher than peers, and almost twice that of CarMax.

Carvana would have to double its workforce efficiency just to match CarMax – yet management is communicating that long-term SG&A, of which compensation is the most significant expense, will be ~30-60% lower than that of CarMax on a per-vehicle basis.

The Salary Lever Has Already Been Pulled: Limited Room For Improvement On Compensation

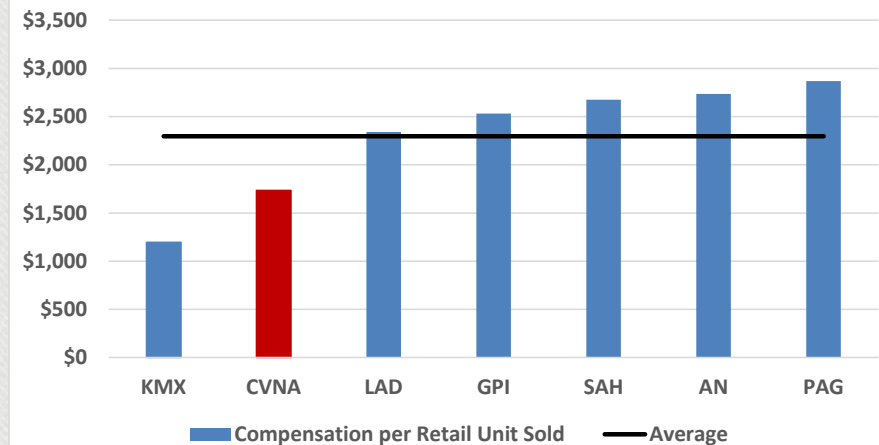
We also note that reported compensation expense per employee is lower than that of all industry peers except CarMax, as is compensation expense per retail unit sold. We question the extent to which Carvana will be able to achieve further compensation cost savings on a per-employee and per-unit basis.

Compensation Expense per Employee



Note: Includes Stock-Based Compensation

Compensation Expense per Retail Unit Sold



Note: Includes Stock-Based Compensation

While Carvana could perhaps achieve levels of compensation efficiency comparable to CarMax, achieving per-unit compensation costs 30-60% lower than CarMax would be extremely challenging.



Online Employee Reviews Confirm Low Compensation And High Turnover

Low compensation levels as indicated by Carvana's filings is confirmed by employee reviews posted online: it appears that management is trying to attract talent without offering attractive compensation by creating a "fun" startup-like culture and hiring young people with low salary expectations. For a company which requires strong customer service and a talented IT team, we worry that growth will be challenged as low salaries encourage high turnover – yet we also note that Carvana has little if any room to cut compensation to support EBITDA margins.

Mar 4, 2018 Helpful (3)

"Since it went public, employee experience decreased"

Current Employee - Anonymous Employee

Doesn't Recommend Positive Outlook

I have been working at Carvana full-time

Pros

Diverse work load. You tend to wear a lot hats so you get tons of experience in a variety of tasks.

Cons

Since going public, they have really cut back on pay and recognition to the employees. More and more talented people are leaving because Carvana refuses to recognize the talent they have and match competing companies of the same size.

[Source](#)

Managing numbers as a public company?

Jun 8, 2018 Helpful (10)

"Do Not Work Here, Ever"

Former Employee - Senior Principal Software Engineer in Phoenix, AZ

Doesn't Recommend Neutral Outlook No opinion of CEO

I worked at Carvana full-time (More than 8 years)

Pros

None I can see at this point

Cons

Human resources employees are incapable of turning a resume over to see the 10 years of experience on the other page.

Advice to Management

Train your human resources to listen to someone when they say, "My resume is more than one page and more than one job."

[Source](#)

Hiring young to limit salaries?

Aug 29, 2018 Helpful (5)

"Culture Flaws, Senseless Managers"

Former Employee - Anonymous Employee

Doesn't Recommend Neutral Outlook Disapproves of CEO

I worked at Carvana full-time

Pros

The snack bar and at corporate they do good for the most part at giving you a work/life balance

Cons

I'm not one to bash but it was apparent to me relatively quickly that the culture they praised during interviews and onboarding was virtually nonexistent.

Politics through the roof. Management was inexperienced and used myself and many of our team mates to do their work while taking the credit and accolades from the C team. Managers are the reason Carvana has incurred such high turnover in the last year -- no doubt in my mind about that.

Another con...most of us were underpaid for the work we did. I felt lucky to land this job fresh out of college with them because it gave me industry experience that allowed me to make a lateral move to a company with competent managers and better culture values.

[Source](#)

Jul 4, 2018 Helpful (6)

"Growing company, lackluster Management"

Current Employee - Technician in Blue Mound, TX

Doesn't Recommend Positive Outlook No opinion of CEO

I have been working at Carvana full-time (More than a year)

Pros

The company has an interesting concept. They are selling vehicles left and right. Their medical is 100% employer paid and you do get Holidays off paid at time and a half. No customer interaction if that is your thing. M-Th night shift work schedule.

Cons

Under Paid for the increasing work load. Long hours. 3PM to 2AM shift normally works well past, sometimes even until 4 or 5. It's all about the system regardless of experience. You could have 10 years of automotive experience and you will be checking washer fluid and batteries an entire shift. No room for advancement.

Advice to Management

Take care of your employees. Asking 5 people to do a 20 person job is counterproductive to meeting goals. Put the right people in the right spots for success. Don't burn out employees by asking them to work 14 hour shifts and tell them they will work Mon - Friday with little mandatory overtime days then expect them to work most Saturdays or night shift they will work Mon - Thurs and they end up working most Fridays also.

[Source](#)

Jan 11, 2019

"Inventory"

Former Employee - Anonymous Employee

Doesn't Recommend No opinion of CEO

I worked at Carvana full-time

Pros

Yes your 'medical' is paid for (just very little a paycheck) no big deal. The ping pong, corn hole, darts...it is fun. Yet does not pay bills!!!! Just for the first maybe 6 months they treat you with donuts, cookies, after that-NO more!

Your Birthday is a holiday.

They talk of everyone gets a 'fitbit' or \$50---no one got either in the beginning! (when do you get that, after putting in a year?)

Cons

Yes, they are a new company and have much 'dust' to go through. Very unorganized when it comes to production-(always something changing to 'improve')

For the sales and revenue of their profits, they should take care more for their employees with higher \$\$\$\$\$. If they can afford the latest high tech equipment for better quality to repair/sell cars...they can afford to increase salaries to benefit for 'high' turnovers.

BEWARE: in your initial interview you will be told, "I understand this is low pay, yet give it 2/3 weeks and you will be making more--" NOT TRUE!! They will drag you along for the 'ride'. They promise much with out delivering.

[Source](#)

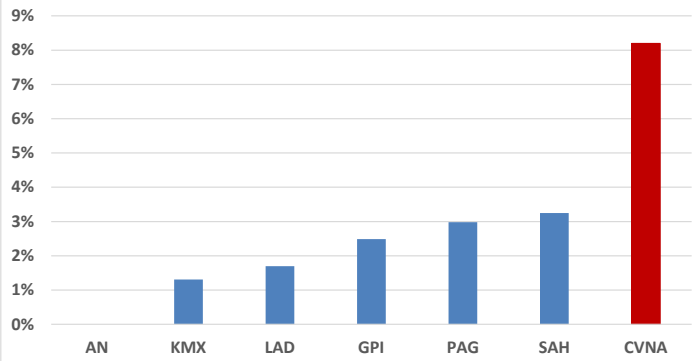
Carvana Faces Major Expenses Which Are Unique To Its “Employee-Light” Business Model

We observe that “Other Overhead Costs” within Carvana’s SG&A expenses represent over 8% of sales for the Company – more than double the corresponding figure of any major auto dealer. Notably, “Other Overhead Costs” include IT expenses, which we would expect to be more significant at Carvana than at other dealers which are not as reliant on online sales. As auto ecommerce becomes increasingly competitive, we expect Carvana to have to continuously reinvest in IT-related R&D to maintain a top-of-the-line ecommerce platform. This cost bucket will not scale as significantly as bulls assume.

Further, as Carvana brings its logistics in-house and promotes its home delivery service, we are skeptical that non-COGS logistics costs will scale more significantly than those of CarMax and other auto dealers. No other major auto dealer breaks out logistics-related costs as a major item in SG&A – but we don’t expect Carvana’s delivery-based model to scale as well over logistics costs.

Other SG&A: IT Costs

Other SG&A as a % of Sales



Material IT-related costs which may not scale well with the business are hidden in “Other” SG&A



“Other overhead costs include all other overhead and depreciation expenses such as IT expenses, limited warranty, travel, insurance, bad debt, title and registration and other administrative expenses.”

- [CVNA FY 2017 10-K](#)

Logistics Costs in SG&A

Transportation and Fulfillment . Third-party vehicle transportation is often slow, expensive and unreliable. To address these challenges, we built an in-house auto logistics network backed by a proprietary TMS to transport our vehicles nationwide. The system is based on a “hub and spoke” model, which connects all IRCs, logistics hubs and vending machines via our owned fleet of multi-car and single car haulers. Our TMS allows us to efficiently manage locations, routes, route capacities, trucks and drivers while also dynamically optimizing for speed and cost. We store inventory at our IRCs, and when a vehicle is sold, it is delivered directly to the customer or transported to a vending machine or fulfillment center for pick-up by the customer. Due to our robust and proprietary logistics infrastructure, we are able to offer our customers and operations team highly accurate predictions of vehicle availability, minimizing unanticipated delays and ensuring a seamless and reliable customer experience.

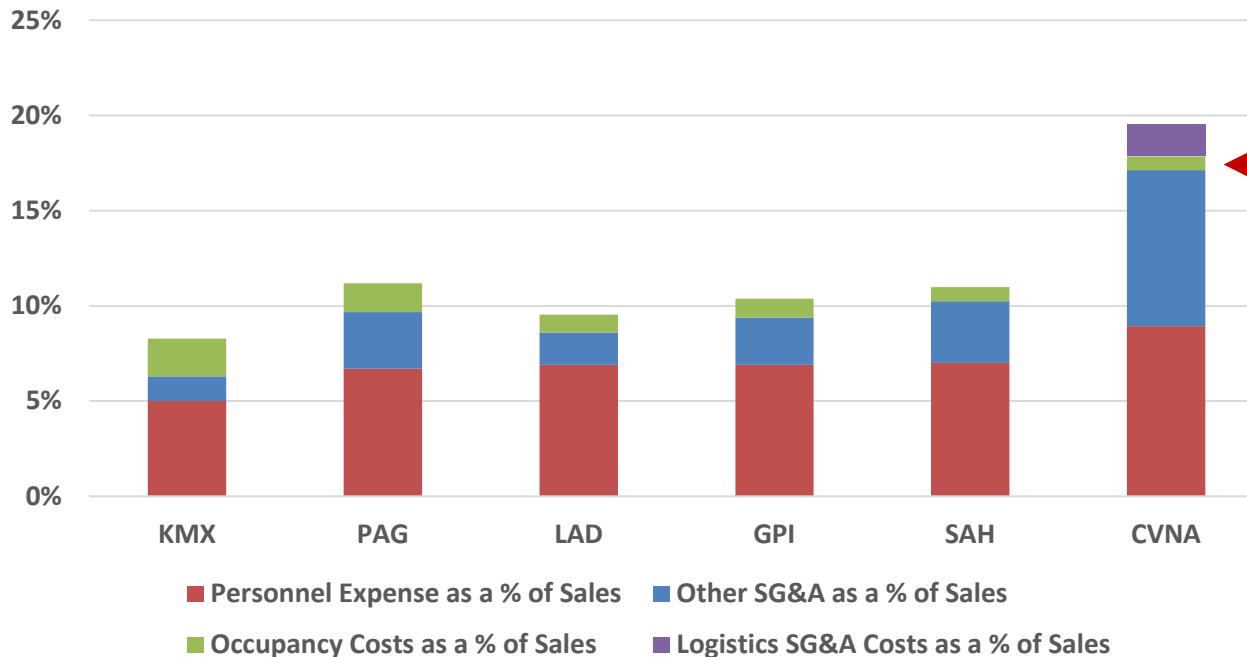
Sounds similar to CarMax, but with a “last mile” component.

Why should we expect logistics costs to scale any better for Carvana than they have for CarMax? How could this possibly be a source of cost advantage for Carvana?

Limited Room For Cost Savings Through Focus On E-Commerce Over Brick-And-Mortar Model

Part of Carvana's supposed leverage lies in its limited reliance on brick-and-mortar locations. Yet we note that occupancy costs generally represent a very small share of SG&A for most auto dealers. We also encourage investors not to ignore the fact that Carvana must still invest in vending machines, fulfillment centers, and – increasingly – in inspection and reconditioning centers as the Company outgrows its shared space with DriveTime. This will ultimately be a source of relative cost savings should Carvana reach maturity, but IT costs, centralized personnel costs, and logistics costs could easily offset any possible savings.

Selected Components of SG&A as a % of Sales



Occupancy costs a relatively small contributor to SG&A across most auto dealers – even traditional dealers with a brick-and-mortar focus

Source: Company filings



Longer-Term Targets Even More Aggressive

While aggressively targeting medium-term GPU of \$3,000 and EBITDA margins of 7%-11.5%, management is even more ambitious in its recently-announced longer-term targets of 15%-19% gross margins (in line with CarMax at 18%-19% when its captive auto finance arm is included) and 8%-13.5% EBITDA margins (exceeding CarMax at 7.7% when its captive auto finance arm is included). We find management's long-term targets just as unrealistic as their medium-term targets: used vehicle ASPs, GPUs, and gross margins have been remarkably steady through the past several years, and there is no reason to believe that Carvana can beat its competitors on gross profitability by as much as five percentage points on sales of what are ultimately undifferentiated products.

November 2018 Investor Day Presentation

LONG TERM FINANCIAL GOALS

	FY 2017	YTD 2018	Long Term Target
YoY Revenue Growth	136%	131%	-
Gross Margin	7.9%	10.3% (1)	15 - 19%
Advertising	6.5%	5.8%	1.0 - 1.5%
SG&A exc. Advertising and D&A	18.2%	14.0% (1)	4.5 - 5.5%
D&A	1.3%	1.2%	0.5 - 1.0%
SG&A Total as % of Revenue	26.0%	21.0% (1)	6 - 8%
EBITDA Margin	(16.9%)	(9.6%) (1)	8 - 13.5%

(1) Excludes the CEO's 100K Milestone GR in Q3 2018. YTD 2018 numbers are for the nine months ending September 30, 2018.

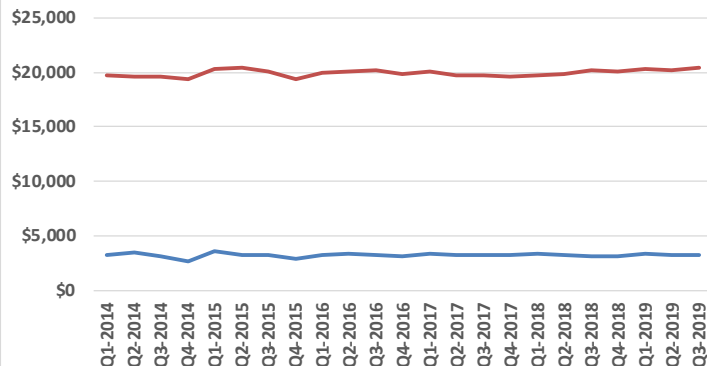
How meaningful are long-term "targets" with such a wide range?

These aren't true "targets" so much as they are pie-in-the-sky aspirations under rosy growth assumptions

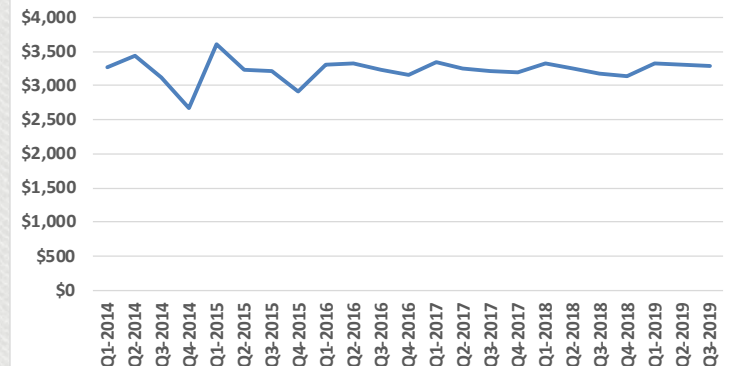
Steady ASPs and general industry competitiveness limit opportunities for used car dealers to expand gross margins

Carvana unlikely to achieve long-term gross margin target given industry competitiveness and historical margin stability

KMX: ASP and GPU (Ex-CAF)



KMX: GPU (Ex-CAF)



“We’ll Do Subprime Loan Origination Better Than Everyone Else!”

We know that Carvana expects to achieve such high EBITDA margins on its perceived operating leverage. But how does it expect to achieve gross margins in line with CarMax’s all-in gross margin (including CAF) without a captive auto finance arm of its own? Management says that they have a “unique finance platform” which “allows us to, while not taking credit risk, monetize finance originations across the entire credit spectrum, not just to the top end of the credit spectrum.” Translation: “We do subprime loan origination just like everyone else – we’ll just be more profitable on it.” Why? (Maybe if a [closely-associated party](#) is willing to help out...)

Q1 FY 2017 Earnings Call

“Great. And maybe just kind of very high level here, during the road show you had kind of guided to 7% to 11.5% EBITDA margins and CarMax probably your closest competitor is around 7.8% last year. And if we kind of look at what you are thinking about in terms of GPUs for total you had about 3,000 versus them maybe close to 4,000 and that's just coming from the SG&A difference that you are applying to gross profit.

So, without opening a capital finance company you are running your own auctions, how do you kind of think about getting to the midpoint or the higher end of your long-term EBITDA guidance?”

- Mike Levin, Deutsche Bank

*“So I think it's a reasonable question to ask kind of what's the gap there, that gap part of that is made up by pricing differences. I think that's really the majority of the gap and our long-term plan.... I think somewhere where we think we debatably can do better is in financing. While they do have a captive finance company and that enables kind of monetizing finance receivables in a more complete way on those receivables that you keep. **We built a pretty unique finance platform that allows us to while not taking credit risk monetize finance originations across the entire credit spectrum not just to the top end of the credit spectrum, while passing that credit risk on to third parties.***

And we believe overtime that could end up being more efficient across some of all customers. So roughly that gives you a sense of kind of the different pieces, and I don't think we're going to break them down further than that.”

- Ernie Garcia III – CEO, Carvana

Carvana's Contribution To Corporate Finance Lexicon: "Ex-Gift"

Spruce Point is often amused by the creative ways in which management teams adjust earnings to inflate company profitability. Carvana has given us a new one: "ex-gift."

In Q3 FY18, to commemorate Carvana's 100,000th vehicle sold, CEO Ernie Garcia III announced that he would grant all current employees 165 CVNA shares from his personal holdings upon their one-year employment anniversaries. For tax purposes, these "gifts" will be structured as stock grants (thereby counting against taxable GAAP earnings) to be offset by matching contributions of stock from Garcia to the Company. Of course, management believes that this does not represent a "real" cost to the Company, since the gift is ultimately coming out of Garcia's pocket. However, with management struggling to keep turnover under control and incapable of generating profits, we interpret this "gift" as a clever incentive designed to preserve a reasonable level of employee loyalty, and minimize additional cash outlay for wages. However, if Carvana is incapable of continuing to prop-up its stock, employees may be less willing to accept this type of equity compensation in the future.

	Three Months En	
	2018	
Retail units sold		25,324
Number of markets		78
Average monthly unique visitors ⁽¹⁾		2,433,815
Inventory units available on website		11,152
Average days to sale		63
Total gross profit per unit (incl. Gift)	\$	2,263
Total gross profit per unit ex-Gift	\$	2,302

Source: [CVNA Q3 FY 2018 10-Q](#)

Interestingly, management appears to treat the "gift" as a component of COGS (and capitalizes some costs in inventory) rather than as part of compensation expense in SG&A, thereby inflating GPU by adjusting for it



If Carvana needs to pay employees a one-year bonus to encourage employee loyalty, reduce turnover and as a substitute for cash, why should this be excluded from Company expenses?

Carvana Outgrowing DriveTime: Can No Longer Rely On Special Relationship

Through its special relationship with DriveTime, Carvana has benefitted from shared facilities and special lease agreements for inspection and reconditioning center (IRC) use, among other things. We expect costs to increase as Carvana is forced to enter into agreements with unrelated third parties for new facilities. While its IRC costs to DriveTime are based on “its pro rata utilization of space at each facility plus a pro rata share of each facility’s actual insurance costs and real estate taxes,” we expect that other overhead will increase Carvana’s facility costs – and, importantly, that increasing pressure to expand its footprint will magnify its capital needs. Fewer opportunities to share costs with DriveTime will render Carvana less scalable as it grows.

The following table summarizes the future minimum payments for operating leases due in each period as of December 31, 2017 (in thousands):

	Finance Leases ⁽³⁾	Operating Leases ⁽¹⁾		
		Related Party ⁽²⁾	Non-Related Party	Total
2018	\$ 2,490	\$ 3,628	\$ 4,576	\$ 8,204
2019	3,356	4,004	4,218	8,222
2020	2,923	4,076	3,904	7,980
2021	2,923	4,149	3,596	7,745
2022	2,940	4,223	3,509	7,732
Thereafter	34,113	22,130	56,749	78,879
Total	\$ 48,745	\$ 42,210	\$ 76,552	\$ 118,762

(1) Leases that are on a month-to-month basis and lease extensions that the Company does not expect to take are not included.

(2) Related Party lease payments exclude rent payments due under the DriveTime Lease Agreement, as those are contingent upon the Company’s utilization of the leased assets.

(3) Payments under the finance leases assume the Company does not repurchase the properties during the lease term. For further discussion refer to Note 7 - Debt Instruments.

Source: [CVNA FY 2017 10-K](#)

Approximately 35% of existing future operating lease expenses through 2022 are through its related-party agreement with DriveTime. As the share of third-party leases increases, opportunities for cost-sharing, or for understating costs through DriveTime, will decline.

Questionable Benefits From Special Relationship With DriveTime

Some of Carvana's past activities with DriveTime are particularly concerning to us. During Q3 FY 2018, Carvana paid DriveTime \$200,000 for flights on aircraft operated by DriveTime. Why is Carvana management flying around on DriveTime's plane?

Carvana has also received several short-term loans from parties related to DriveTime. The Company entered into a \$50M facility with Verde – a DriveTime affiliate run by a former Garcia II associate and DriveTime executive, and in which Garcia II has financial interests – in February 2017. It drew down \$20M on the facility in that quarter before returning the money. Carvana also took out a brief \$10M loan from Garcia II himself in 2016. Again, as Carvana outgrows DriveTime, it will not be able to rely on its former parent for substantive financial help – and we wonder if it should have relied on DriveTime for this kind of help in the first place.

CVNA Q3 FY 2018 10-Q

Aircraft Time Sharing Agreement

The Company entered into an agreement to share usage of two aircraft operated by DriveTime on October 22, 2015, and the agreement was subsequently amended on May 15, 2017. Pursuant to the agreement, the Company agreed to reimburse DriveTime for actual expenses for each of the flights in which the Company uses the aircrafts. The original agreement was for 12 months, with perpetual 12-month automatic renewals. Either the Company or DriveTime can terminate the agreement with 30 days' prior written notice. The Company reimbursed DriveTime approximately \$0.2 million and \$0.0 million, respectively, under this agreement during the three months ended September 30, 2018 and 2017, respectively, and approximately \$0.4 million under this agreement during each of the nine months ended September 30, 2018 and 2017.

Seems excessive for a small company like Carvana...

Credit Facility with Verde

On February 27, 2017, the Company entered into a credit facility with Verde for an amount up to \$50.0 million (the "Verde Credit Facility"). Amounts outstanding accrued interest at a rate of 12.0% per annum. Upon execution of the agreement, the Company paid Verde a commitment fee of \$1.0 million. In connection with the IPO, the Company repaid the outstanding principal balance of \$35.0 million and accrued interest of approximately \$0.4 million in full and the Verde Credit Facility agreement terminated.

Garcia II is a principal at Verde – this was effectively a loan from family interests

CVNA FY 2018 S-1

Loan from Ernest Garcia, II

On March 31, 2016, the Company entered into a loan and security agreement with Ernest Garcia, II ("Mr. Garcia") of \$10.0 million. The loan bore interest at an annual rate of 4.0% and had a maturity date of May 1, 2016, at which time all unpaid principal and accrued interest were payable to Mr. Garcia. On April 1, 2016, the Company received the proceeds from the loan and on April 28, 2016, the Company repaid the principal and accrued interest, thereby terminating the loan.

Carvana can no longer go running to Garcia II whenever it runs out of cash...



Mesa – The owner and founder of DriveTime Automotive Group, Inc in Phoenix has acquired an office-industrial project in Mesa that will house hundreds of new employees being hired by the fast growing national used car business. Verde Investments Inc. in Phoenix (E.C. "Ernie")

Garcia, principal) paid \$8.8 million (\$82.07 PSF) to buy the 15.97-acre Superstition Commerce Park, which is located west of the northwest corner of US 60 and Sossaman Road.

[Source](#)



Aggressive Business Practices Potentially Running Afoul Of Regulatory Guidelines

Poor Reconditioning Practices And Lack Of Disclosure Regarding Vehicle Condition

We find countless reports of Carvana vehicles being delivered in poor condition. While many of these are complaints about the cosmetic state of the car, we also find a sizable quantity of more serious claims regarding the condition of delivered cars. In many cases, Carvana has delivered vehicles in dangerously poor condition, and has hidden the fact that a vehicle has been in an accident. Note that, depending on the state, failing to disclose that a used vehicle has been in an accident constitutes dealer fraud.

My credit arguable isn't the best and to be quite honest I've never financed a vehicle before, I've always paid in cash. The fact that I was able to get financing through USAA Bank at a lower rate was somewhat of a welcomed surprise, ALWAYS shop around for your financing before making the second biggest purchase of your life.

I did a once over while it was still on the truck, I noted some somewhat serious issues on the driver side, along with the front and back bumpers, the driver said he would make a note of it.

The paint on the rear bumper was mismatched, the front bumper and the whole drivers side of the vehicle had horrible orange peel, trash in the paint, clear coat flaking, spots where the paint had been sprayed on to thick, two gouges in the paint down to bare metal and overspray all over the car. These repairs look to be recent, it's obvious that this car had at least been in a minor collision and in attempts to cover this up, they tried (and miserably failed) to fix the issues.

- This car has a clean CarFax: "Minor collisions without being reported to insurance, most often times do not show up on a CarFax."

[Source](#)

So I proceeded to do a quick check of the interior equipment to make sure everything was in order. Everything was working well, and we were ready for the test drive. I routinely park on an inclined surface and always use the parking brake, so by habit, I went to pull the release handle and the whole handle pulled out in my hand! I look over at the poor delivery guy and he's like, "Well, that wasn't supposed to happen." He was clearly embarrassed by this as it certainly doesn't reflect well to the 150 point inspection or whatever they advocate. But he really stepped up here, and called both Carvana and SilverRock on my behalf, making sure they took note of it so that it would be addressed. He also informed them of the batteries that needed to be replaced in both keys, as the readout said they were low.

Summary: -Not sure I put too much confidence in their 150 point inspection. Missing a broken parking brake release makes the car borderline unsafe to operate (imagine if this were a manual transmission?). Get your own independent inspection. It's not all that expensive when you consider your investment.

[Source](#)

- The car was delivered with more miles than advertised
- The car was "detailed" but still had wax on it, but also had dirty windows, dirty seats and interior, and bugs on the bumper
- There's a problem with the clutch
- There's a problem with the clutch pedal
- The rear-end makes a droning noise at highway speeds
- The rear brakes make a scraping sound while moving with no brakes applied
- You can smell the car burning oil
- I've gotten three "big deal" warning lights on the dash in four days

I would also bet on cars getting returned by customers and not getting re-inspected, re-detailed, and having the mileage updated. I'm pretty sure that's why I received a car that wasn't detailed. They just cleaned it up a bit after the last person returned it.

[Source](#)

told me he would inquire about it and get back to me...The car was delivered on January 18th. I had the car inspected by a mechanic on January the 22nd. The first words the mechanic said to me were "Did you know this car has been in a wreck?" I told the mechanic that Carvana said it had been damaged in transport. The mechanic told me that it was more than damaged. It had been in a wreck. He could see the damage under the rear bumper. He said the back door and bumper had either been replaced or repaired, and the rear tail lights were replaced with used tail lights that didn't match the head lights. When my husband and I called Carvana to let them know what the mechanic said, the supervisor gave us the run around... We never received pictures of the damages, we never received papers on the extent of the damages, so needless to say we are returning the car tomorrow, and we will be waiting for our full refund. Carvana sucks. They are no better than used car salesman selling cars to unsuspecting customers. If I could give zero stars, I would... Buyer Beware.

[Source](#)

to why I did not get such notice. I had a friend with me to help me inspect the vehicle. Advocate unloads car, it seems pretty clean at first sight. The advocate did a good job delivering the vehicle I must say. However, my face started turning stern as I started the inspection. My advice to potential buyers is that, be VERY VERY WARY of the graphical representations of the cars on Carvana. I found WAY MORE imperfections in many places including small dents that were not informed. In some sense, this is false advertisement! Ok, so I suck it up and start to inspect the interior and the engine. Interior: again, scratches along the driver side door interior that was not informed. Transmission reset switch cover missing. Now to the engine. I was appalled when I first opened the bonnet. There were old leaves laying in the engine...I was like, wait, how does a car that was recently inspected have old autumn leaves laying around in the engine? The engine compartment was lot dirtier than how it was pictured online. Besides that however, the engine Second day, a day filled with issues. The fuel gauge is going whack and would go up and down and I have no idea how much gas I have left. Tire pressure warning light comes on. So at this point, I took the car to a local mechanic. He put the car on the rails and in less than 15 minutes, we find major evidence suggesting that the car had been in an accident or a crash. The right front underside frames have been bent, struts were replaced, and the upper coverings of the wheel arch were replaced and bolts were missing. A major giveaway that some considerable body work had been done. We also found that the front bumper right side had been damaged and I could easily move the bumpers off with my fingers. The mechanic assessed the tire pressures and readjusted. Yet, the warning lights wouldn't go away and even after seeing if driving off would reset the light, it's still on.

I called Carvana, sent in the pictures, but all they are telling me to do is get in touch with their warranty supplier and go through the repair process. Are you kidding me? Worst of all, they sold me a car that was in an accident. Here's where I will advise again, DO NOT TRUST THE CARFAX REPORTS CARVANA PROVIDES. Your vehicles may have been in accidents and they will not show up on the report if it was not reported by the previous owners. It's as simple as that. Carvana says they are accident free just because it doesn't say so on Carfax. Yet, they weren't able to catch these issues with my car that a mechanic found in less than 15 minutes through their 153 point inspection? There's really something fishy going on here.

[Source](#)

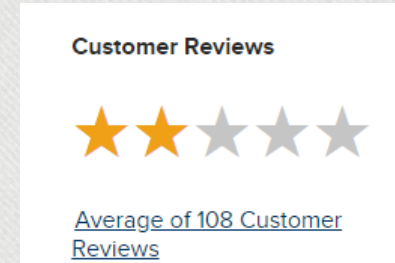
The Truth Is Out There – Just Not On Carvana's Website

Reviews on Carvana's own website are, of course, stellar. The story is much different on sites not overseen by the Company.

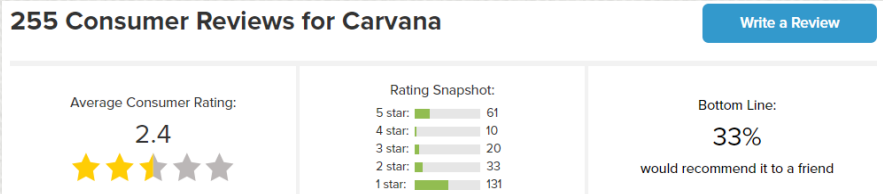
Customer Reviews: [Carvana.com](https://www.carvana.com)



Customer Reviews: [Better Business Bureau](https://www.bbb.org)



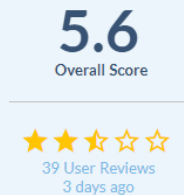
Customer Reviews: [HighYa](https://www.highya.com)



Customer Reviews: [BestCompany](https://www.bestcompany.com)

Carvana

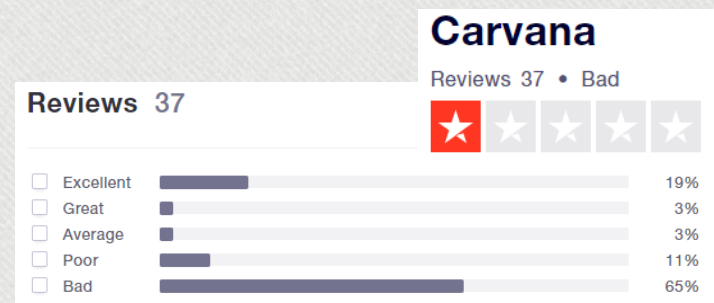
Carvana is not entirely transparent on its corporate website



Customer Reviews: [Yelp](https://www.yelp.com)



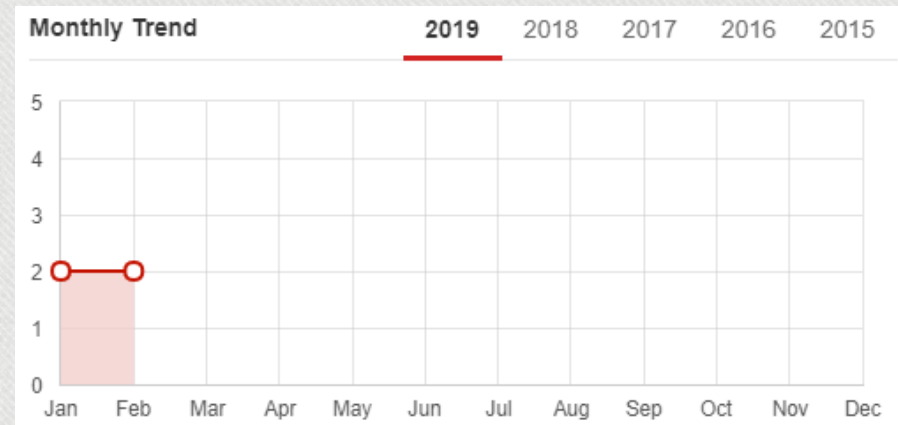
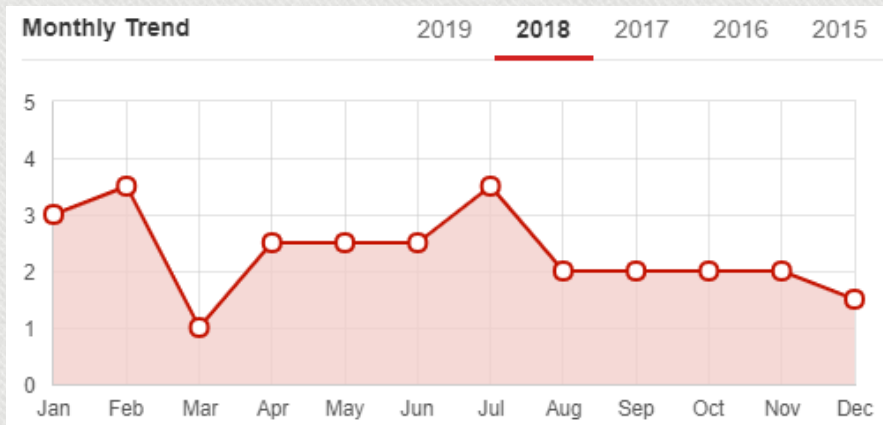
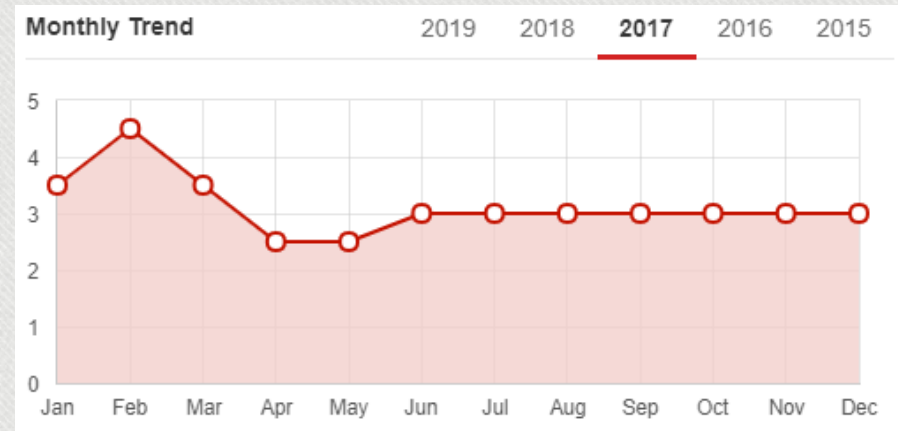
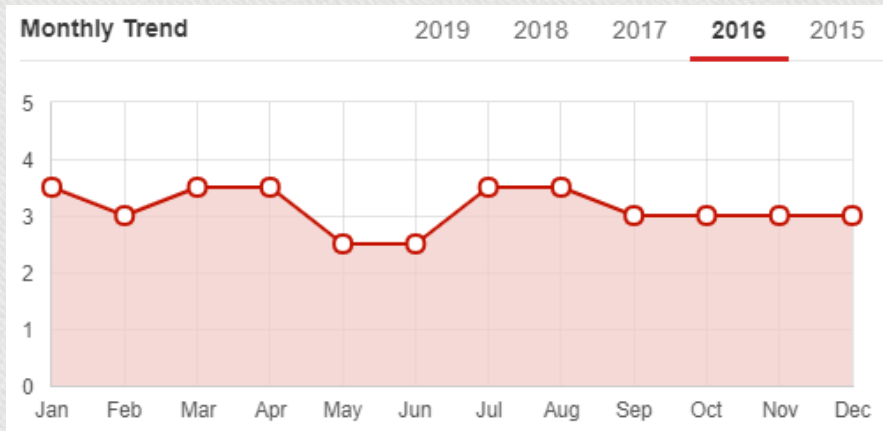
Customer Reviews: [Trustpilot](https://www.trustpilot.com)



Declining Reconditioning Practices As The Company Pushes To Satisfy The Street

Third-party reports suggest that, while Carvana used to be more diligent about conducting vehicle inspections, the Company has grown increasingly careless since it went public, and as it has gradually outgrown DriveTime's capacity for inspections and reconditioning. With management now incentivized to keep numbers up to paint a rosy picture for investors, this comes as no surprise to us. Reports of declining inspection standards and vehicle quality are corroborated by Yelp trends.

Trends In Customer Reviews: [Yelp](#)





A Higher Regulatory Standard?

Section 5 of the Fair Trade Commission Act (“FTC Act”) outlaws “unfair or deceptive acts or practices in or affecting commerce.”¹ Is Carvana in violation of the FTC Act for failing to disclose the condition of its vehicles completely and accurately to customers?

We believe that Carvana should be held to a higher standard than are other car dealers with respect to FTC Act compliance, as Carvana’s customers cannot inspect the state of a vehicle before making a purchase decision. While Carvana does give customers a seven-day window for returns, symptoms of undisclosed problems with a vehicle may not express themselves until later. Further, with buyers already having secured financing, released a down payment, and completed the purchase process prior to receiving the car, many customers would likely prefer to avoid the hassle of returning the car and restarting the car shopping process.

This is “Buy Here, Pay Here” level of customer service, I still have the ability to return the vehicle as I was able to get them to extend the return period till this Friday.

Heavily considering this option, although I’m not looking forward to talking to my bank and dealing with even more of a mess.

[Source](#)

Carvana ties up the customer in the purchase process before giving him a chance to inspect his vehicle, making it more costly for the customer to shop elsewhere if he is ultimately unsatisfied with his car.

I called Carvana, sent in the pictures, but all they are telling me to do is get in touch with their warranty supplier and go through the repair process. Are you kidding me? Worst of all, they sold me a car that was in an accident. Here’s where I will advise again, DO NOT TRUST THE CARFAX REPORTS CARVANA PROVIDES. Your vehicles may have been in accidents and they will not show up on the report if it was not reported by the previous owners. It’s as simple as that. Carvana says they are accident free just because it doesn’t say so on Carfax. Yet, they weren’t able to catch these issues with my car that a mechanic found in less than 15 minutes through their 153 point inspection? There’s really something fishy going on here.

Now needless to say, I am going to give it a second try and replace it with another car. After all, everyone deserves a second chance, right? However, I am only giving it a second chance only because I do need a car quick and because I already have my foot in the door...(insurance, down payment etc.). So this second chance is only for my own sake, not because I trust Carvana to deliver a better service on the second go. I will update as I go.

[Source](#)

By failing to conduct thorough inspections before selling its vehicles, and then covering any servicing conducted by third parties during the seven-day trial period through SilverRock – Ernest Garcia’s auto insurance company – the Garcias could be, in effect, shifting pre-sale inspection and reconditioning costs from Carvana to another family-owned entity, thereby inflating Carvana earnings.

Note that, since Ernest Garcia II holds such a large stake in Carvana, whether he absorbs these costs through Carvana or SilverRock makes little economic difference to him. He would probably rather absorb the costs through SilverRock to improve Carvana’s numbers and encourage public investment in the stock.

SilverRock Engaged Employer

Overview 16 Reviews 14 Jobs 8 Salaries 4 Interviews 5 Benefits 1 Photos

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[Source](#)

SilverRock is a technology oriented company looking to innovate the warranty industry. SilverRock is backed by a \$4.5 Billion finance company that also owns 144 auto dealerships. Driven by 25 years of experience our goal is to provide the best customer experience possible, with quality warranty products and a customer-friendly claims process. We look to our outgoing and driven employees who possess experience in customer service, auto sales, and technology to lead this company into the future.

Odd that even SilverRock –Ernest Garcia’s non-public auto insurance company – describes itself as a “disruptive” and “innovative” “tech business”...

1. [Fair Trade Commission Act, Section 5](#)

Offloading Inspection And Reconditioning Costs To DriveTime/SilverRock?

While Carvana sells separate extended warranty plans which are ultimately sold to SilverRock for a fee, it covers all customers under its limited warranty, which covers “certain broken or defective components” over 100 days or 4,189 miles.¹ Liabilities associated with this coverage fall on Carvana rather than SilverRock. However, we know that SilverRock also administers Carvana’s limited warranty¹, and that repair costs are first charged to SilverRock. As SilverRock is a related party, are we confident that Carvana is being charged a fair price for SilverRock’s coverage of its limited warranty? If Carvana is increasingly negligent in its inspection and reconditioning practices, do corrective service charges ordered under the limited warranty constitute effective reconditioning charges which are shifted from Carvana to SilverRock, for which Carvana may never be charged a fair price? If so, can this practice persist as Carvana continues to outgrow DriveTime/SilverRock?

Carvana Limited Warranty Summary

Carvana's 100-Day/4,189-Mile "Worry Free Guarantee"

Every car we sell comes with a Limited Warranty for 100 days, or 4,189 miles, which ever expires first. Our goal is to make sure you are well-versed as to what is covered under our “Worry Free Guarantee.” Please note, this is a summary only. We encourage all of our Carvana customers to read the Limited Warranty to ensure they understand what is and is not covered.

Definitions (this is more detailed and uses the legal language out of the Limited Warranty).

(1) **Administrator** means SilverRock™ P.O. Box 29087 Phoenix, AZ 85038, Toll Free: (866) 628-3905.

I call Carvana. "Dealership says I'm out of warranty, but shop says dealership should do this." Carvana: "Let me check... no that car is definitely still under the 70,000 mile powertrain warranty. If it's a transmission issue, it's covered." Me: "What if it's not a powertrain issue?" Carvana: "The car is covered under a 4000 mile warranty from Silverrock." I call the dealership back. Dealer: "No, not true, And that 70,000 powertrain warranty was for the original owner only. And we don't work with 3rd party warranty companies" I call Carvana back. Carvana: "That's weird, I've

[Source](#)

Three days after delivery I took the vehicle to the dealership for a PPI (pre-purchase inspection). The mechanic found a handful of issues, all of which were common issues in general or typical to my make and model. According to him, everything would be covered by the manufacturer’s warranty if my car still had one, so I assumed the Carvana warranty would take care of everything. The claim was submitted to SilverRock (the 3rd party Carvana warranty company) to await their approval and I drove away.

[Source](#)

SilverRock, a related party, administers Carvana’s limited warranty. Does Carvana pay a full price for this service?

1. [Carvana Limited Warranty](#)



Carvana Getting Increasingly Favorable Commissions On Related-Party VSC Sales?

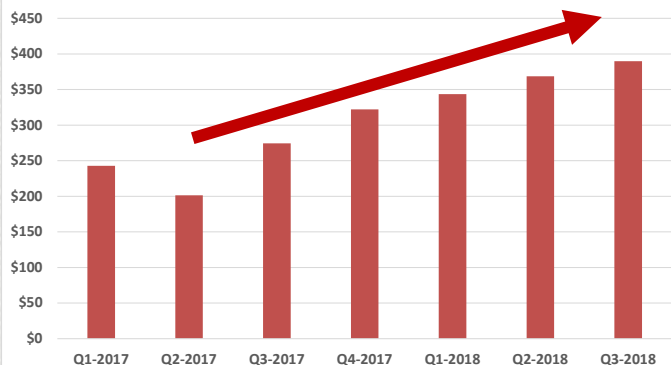
Dating back to FY15, Carvana consistently generated about \$250 in VSC-related sales per used retail vehicle sold. However, this number has grown rapidly since H2 FY17 at a compounded quarterly growth rate (CQGR) of 14%, and now stands at \$390 – almost double where it stood in Q2 FY17. We note that this growth began not long after Carvana entered into a master dealer agreement dated December 9, 2016 under which it agreed to sell its VSCs to DriveTime (to be administered by SilverRock) (see [FY17 10-K](#)).

Like [revenue from loan sales](#), VSC-related revenue carries 100% gross margins. Assuming a baseline level of VSC-related revenue per car of \$250 for Carvana, the recent growth of this figure to \$548 boosted Q3 FY18 GPU by 6.5%. At \$250 of VSC-related revenue per car, Q3 GPU (Ex-Gift) would have been just \$2,163 versus \$2,303 reported GPU (Ex-Gift). Is this a legitimate source of gross profit for Carvana, considering that it is generated from related-party transactions?

Carvana VSC-Related Revenue per Used Retail Vehicle

(\$M, except per-vehicle numbers)	FY15	FY16	Q1 FY17	Q2 FY17	Q3 FY17	Q4 FY17	FY17	Q1 FY18	Q2 FY18	Q3 FY18
Other Revenue	\$1.7	\$13.0	\$5.0	\$7.6	\$9.8	\$11.1	\$33.4	\$16.2	\$20.7	\$27.2
Revenue From Gains On Loan Sales (From CF Statement)	0.0	7.4	2.9	5.4	6.6	6.7	21.7	9.9	12.4	13.3
Revenue From Refinancing Agreements	-	-	-	-	-	-	-	-	-	4.0
Revenue From VSC Sales (Implied – Our Estimate)	1.7	5.6	2.0	2.2	3.2	4.4	11.7	6.3	8.3	9.9
Used Retail Vehicles Sold	6,523	18,761	8,334	10,682	11,719	13,517	44,252	18,464	22,570	25,324
VSC-Related Revenue per Used Retail Vehicle – Spruce Point Estimate	\$257	\$296	\$243	\$202	\$274	\$322	\$265	\$344	\$369	\$390

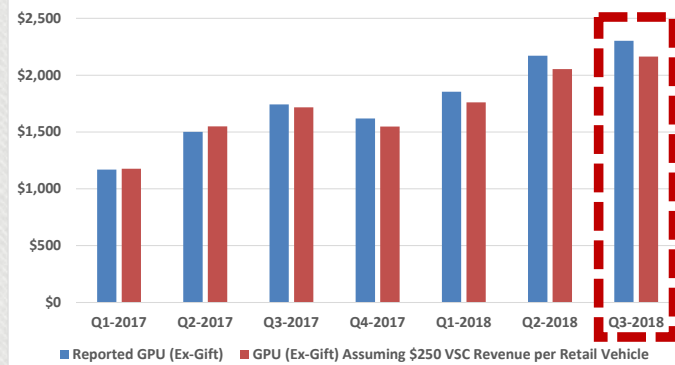
Carvana: VSC Revenue per Retail Vehicle Sold



VSC-related revenue per used retail vehicle sold for Carvana was steady at around \$250 since FY15.

Why did this figure nearly double between Q2 FY17 and Q3 FY18?


Carvana GPU (Ex-Gift) - Reported vs. Hypothetical



The sudden increase in Carvana's VSC-related revenue per retail used vehicle to \$390 increased Carvana's GPU by 6.5% in Q3 FY18 (versus a baseline of \$250).

Growth In VSC Income Per Vehicle At Best A Reflection Of Questionably Aggressive Practices

The observed growth in VSC income per car, if not attributable to changing VSC sale price arrangements between Carvana and DriveTime, could perhaps be attributable to rising attach rates: more customers may be signing up for CarvanaCare. In fact, former employees with whom we spoke noted that, at some point over the last two years, Carvana changed its online sales process to make the extended warranty a default option at checkout – and that, as a consequence, the Company received frequent complaints from customers who had unintentionally and unknowingly purchased an extended warranty or GAP coverage. Others have suggested that customers would be charged a higher price on their vehicle if they opted out of the warranty. If this is in fact the source of Carvana's rising VSC income per car, we believe that it may be a reflection of aggressive business practices which run afoul of FTC guidelines.

 **carvanaIsBroke**
Comments (4) | + Follow



I may be able to answer this. During the development of their new purchase process, they focused everything on those service contracts and other 3rd party addons.

For a while, they had a bug that required CSRs to manually reset the service contracts if the customer changed the vehicle or something else. I wouldn't doubt this, along with a buggy purchase process and clever design, causes the numbers to be high.


A lot of customers early on called to complain that they didn't sign up for a service contract (they did b/c the site in a way tricked them into it).

They also had tons of areas during the process and on the vehicle details page where prices would be different because the engineering dept didn't architect stuff properly so there was different calculations and methods used for the same thing all over the place. That also lead to frequent customer complains. I do know they started an effort to fix the pricing, because that's a big-no-no, but I don't know if they fixed it.

For example the search page had 1 price, the vehicle details another, and the purchase sections had different prices. Prices also vary if you're logged in and have 'saved terms'. They had multiple issues with saved terms and pricing. It was a nightmare.

07 Feb 2019, 06:40 PM  Like 0  Reply



[Source](#)

 **carvanaIsBroke**
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From what I remember, they loved those VSCs. They were almost pure profit from what other engineers who were involved with the purchase process and the lead finance engineer told me. They maybe have stated 80% or more. I remember this because the VSCs and pricing calculations were a huge deal to them. They really wanted to aggressively push for the VSCs and other addons (they have another name for all of that but I can't remember it).

It was definitely at least \$1800 no matter the cost. The car price wasn't a huge factor in the cost of it from what I recall. However I didn't write the financial code, I only spoke to the main guy who did.

It would be hard to figure out the exact formula because a lot goes into it but you may get a better idea if you made an account and go through the purchase process. Play around with their financial calculator sliders. At the time, the sliders on the vehicles page calculated differently than on the purchase process page. So watch out for that too if they didn't fix it! They might even still have the finance api exposed, you may still be able to freely query it, but I haven't been on the site in a few years now so I don't know.

07 Feb 2019, 07:07 PM  Like 0  Reply

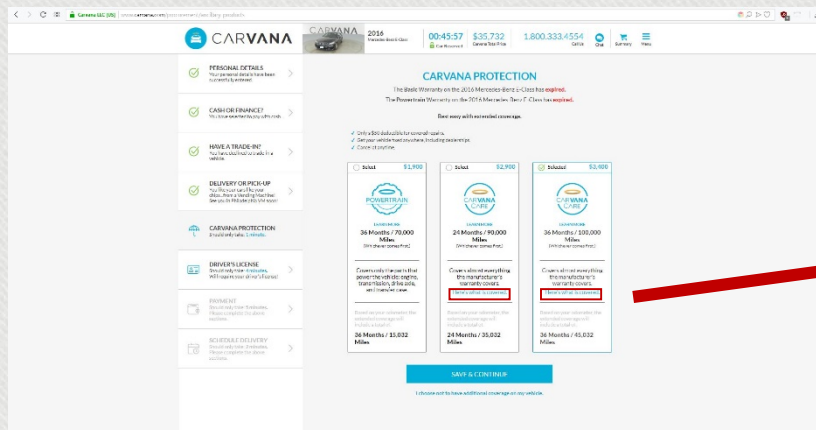
So is the growth in VSC income per vehicle to increasingly favorable pricing agreements between Carvana and DriveTime, or aggressive warranty sales practices? We find both explanations worrisome.

Is Carvana Violating FTC Guidance In Failing To Provide Terms And Conditions?

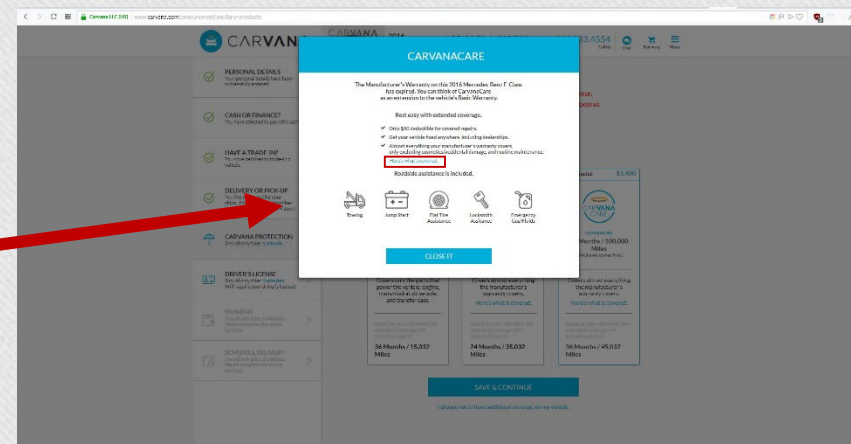
Carvana appears not to be up-front about the details of its VSCs with customers. Spruce Point made multiple attempts to obtain CarvanaCare terms and conditions in the course of our research. In all but one instance, we were either instructed to proceed with the purchase process (during which we would supposedly be presented with the terms), directed to the [terms of Carvana's limited warranty](#) (which we were incorrectly told were identical to CarvanaCare's terms), or given a [list](#) of items covered under CarvanaCare (but not the formal terms and conditions themselves). In the one instance in which we were provided with formal terms and conditions, we were given the document only after first being directed to information on the limited warranty. A less inquisitive shopper would have taken the sales assistant's word that it was identical to CarvanaCare's terms and conditions.

Per FTC guidance, disclosures like these “should be provided before the consumer makes the decision to buy, e.g., before clicking on an ‘order now’ button or a link that says: ‘add to shopping cart.’”¹ Yet Carvana does not make its extended warranty terms openly available on its website to customers before they select a car – nor are they available at the effective point of purchase.

Carvana Checkout Page – Extended Warranty Selection



“Here’s what’s covered” Popup



During the point of the checkout process at which the customer is asked to select a warranty plan, clicking “Here’s what’s covered” generates a small, uninformative popup message describing CarvanaCare’s coverage in extremely general terms. The “Here’s what’s covered” link on this popup directs the customer to a [list](#) of items covered under the extended warranty plan. Nowhere at this stage of the checkout process – the effective point of purchase for the warranty plan – are the formal terms and conditions made available to the customer.

Stringent Restrictions Reduce Likelihood Of Warranty Claims On CarvanaCare

We find a number of CarvanaCare's terms to be particularly strict and out-of-line with industry standards. For example, Carvana requires that customers get an oil change every six months or 5,000 miles, which is more frequent than is required by many vehicle manufacturers as per their own owner's manuals. A customer who failed to read comprehensively through CarvanaCare's terms and conditions (which, again, are not liberally provided to the customer during the purchase process), yet who diligently adhered to manufacturer maintenance guidelines, may still run afoul of CarvanaCare maintenance requirements. Other auto dealers, such as AutoNation, instead require that customers adhere to the maintenance guidelines set out by the vehicle manufacturer. We believe that CarvanaCare maintenance requirements are unusually and unnecessarily strict – an offense made more malicious by the fact that Carvana does not openly provide CarvanaCare terms and conditions on its website or during the purchase process.



CarvanaCare

APPLICATION/CONTRACT NUMBER

CVSC

YOUR OBLIGATIONS

- In order for this Contract to remain in force, the minimum requirement on oil and oil filter changes is every six (6) months or 5,000 miles, whichever occurs first. If Your Vehicle is equipped with a timing belt, the belt must be replaced before Your Vehicle's odometer reads 60,000 miles. If the manufacturer requires shorter maintenance intervals than those listed above, You must follow the manufacturer's recommendations. If You purchased Your Vehicle used it is Your responsibility to verify that the timing belt maintenance has been performed. All other maintenance and servicing must be followed as recommended by Your Vehicle's manufacturer. You are responsible for maintaining correct levels and types of fuels, lubricants and coolants. You must keep and make available verifiable signed service/purchase receipts which show that this maintenance has been performed within the time and mileage limits required.

CarvanaCare Terms and Conditions



INFORMATION SCHEDULE

Agreement #

VII. YOUR RESPONSIBILITIES

- You must perform maintenance services to Your Vehicle, at the proper intervals, as required by the Owner's Manual for Your Vehicle.** If Your failure to follow these procedures causes a Breakdown, You may be denied coverage. If You do not have an Owner's Manual, contact Your Vehicle's manufacturer to obtain one.

**AutoNation Vehicle Protection Plan
Terms and Conditions**

TL;DR Pay your local dealership to do a PPI (pre-purchase inspection) during your return policy. It's worth it. [/u/Doug-DeMuro](#) would not be impressed with the bumper to bumper CarvanaCare warranty. They will tell you that it is the same as the manufacturer's warranty, but it is significantly worse. At least the return policy is good. I needed to use mine.

I took delivery of my car on a Saturday. During delivery, I noted some cosmetic issues with the vehicle that were not documented online. There were some documented issues online that were not as severe the ones they chose not to list, which was weird to me. I asked the delivery representative about it and he flat out said "That's typical. We don't list many cosmetic issues online because we don't want to discourage people from purchasing our cars." Additionally, according to the person who delivered my vehicle, any damage around the perimeter of the vehicle that is beneath the center of the wheels is considered road rash and will, by Carvana policy, not be mentioned. The cosmetic issues

Carvana improperly gives customers the impression that CarvanaCare's terms are similar to those of manufacturer warranties, when in fact they are more strict...

...yet Carvana also does not thoroughly inspect and recondition its used vehicles. Why does Carvana get to impose more rigorous maintenance standards on the customer while giving itself a pass?

Source



Undisclosed Gaps In GAP Coverage Suggests Aggressive VSC Sales

Carvana offers GAP waiver coverage in addition to its extended warranty. What the Company doesn't tell you is that it is licensed to provide GAP coverage in only 14 states (as of Sept 2018). We have found numerous instances of customers purchasing GAP coverage from Carvana only to find out later, whether through independent research or reading the post-sale fine print, that Carvana is not licensed to sell GAP coverage in their respective states. We are highly confident that Carvana has illegally sold GAP coverage to countless more customers in non-qualifying states, as it says nothing about state-by-state restrictions on its [protection plan website](#). It appears that Carvana is doing all that it can to maximize its 100% gross margin VSC revenue.

Great experience, just wish I hadn't gotten GAP (self:carvana)
submitted 1 month ago by Shifu_1

First of, I still have quite a few discount codes available for anyone interested.

I wrote a review a while ago about my car buying experience. The whole buying process went really well and I am still happy with the car.

I however found out it doesn't make any sense to have gap through them, first off they don't even offer it my state ... so I wonder what happened there, and then I figured it doesn't make any sense to pay interest on both instead of just paying monthly.

I contacted my own insurance and found out gap costs a dollar a month with them, so naturally I cancelled my 600\$ gap with carvana. Initially I was told I would be getting the money back as a check, I thought, great a Christmas bonus, but I ended up getting in paid into my loan's principal.

I also cancelled the warranty, both were pretty painless to cancel and I might get third party warranty that isn't part of my interest gaining loan.

In short, it's not really worth buying the warranty and gap especially if they get thrown into your loan.

9 comments share save hide report

[Source](#)

GAP coverage probably not available to you, also read your contracts all 50 times you have to resign them
submitted 4 months ago by jarbjarbajinks

When i got my personalized terms, i started the buying process for a car that was 500 down and between 2 and 3 hundred a month. During checkout they offer GAP coverage for about 19/month. Awesome, i selected it. Reading through the FAQ about transferring my plates i randomly see that GAP coverage is only offered in 14 states, and mine isnt one. I reach out and they say "whoops, nope not available in your state well update that just resign your contracts" im resigning and i see that my down payment is supposedly 2900 now. What? I call back and they say that my terms had expired hours earlier and theyll submit a support ticket to try and get my original terms back. Worth noting that originally doing the funds verification on the 8th they said theyd expire around 3pm on the 10th so call them early..I called 9am when the bank opened and they specifically asked the bank rep about 500 and not a penny more. Every step of the way there seems to be some kind of fuck up on their end and it always costs me getting the car in a timely manner.

1 comment share save hide give award report crosspost

[+] jarbjarbajinks [S] 2 points 4 months ago

Just an update they did approve my support ticket to get my original terms and down payment back, although i find it unfortunate it took an additional day to do so

permalink embed save report give award reply

[Source](#)

Charging more to customers who do not elect GAP coverage to make up for loss of 100% gross margin revenue?

Why were these customers offered GAP coverage in the first place?

Shouldn't Carvana's system have known that they were in states in which it doesn't offer GAP coverage?

Is Carvana just hoping that customers don't do their homework and end up buying GAP coverage anyways?

What happens when a Carvana customer who purchased illegally-sold GAP coverage ends up putting in a claim?

Aggressive Sales Practices Generate Lucrative Service Revenue From Unknowing Customers

Violating state or federal law regarding the sale of extended vehicle warranties or GAP waiver coverage could expose Carvana to serious loan reassignment risk, which could cripple the Company given its strained financial situation. Failing to conduct sufficient vehicle inspections, recondition vehicles as needed, and disclose the state of the vehicle to the buyer would also likely run afoul of state or federal law, amplifying this risk.

We encourage Carvana's financing partners – including Ally and all other involved parties – to investigate these matters before conducting further business with Carvana.

CVNA FY 2017 10-K

We make certain representations concerning the automotive finance receivables we sell. If those representations are not correct, we could be required to repurchase the receivables. Any significant required repurchases could have an adverse effect upon our ability to operate and fund our business.

We generally seek to sell automotive finance receivables to third parties. If these receivables do not meet the specified representations, we have in the past been, and may in the future be, forced to repurchase these receivables. If we sell a significant amount of receivables that do not meet the predetermined representations, we may be required to use cash on hand or to obtain alternative financing in order to repurchase them. Any significant repurchases could have a material adverse effect on our business, results of operations and financial condition.

As Carvana has already been forced to repurchase receivables in the past for misrepresenting them to buyers, we do not take this risk lightly. We believe that the Company's apparent misrepresentations of the status of its vehicles to customers, in addition to its aggressive VSC sales practices, may violate state or federal law and thus precipitate significant loan reassignments.

Lack Of Transparency Regarding Related-Party F&I Income

On its FY 17 income statement in both its [FY 17 10-K](#) and its [S-1 filed on April 23, 2018](#), Carvana reports that it realized \$8.9M in related-party “other sales” in FY 17. On page 92 of its 10-K and page F-22 of its S-1, we see that this \$8.9M represents commissions received on VSCs sold to SilverRock (DriveTime) “and administered by DriveTime.” However, on page 144 of the [2018 S-1](#), the Company reports that it received \$10.5M in “VSC sales pursuant to the master dealer agreement” – e.g. revenue from VSCs sold to SilverRock. Was this extra \$1.6M associated with GAP coverage administered by SilverRock, which was not discussed in the former disclosures? Is it not recognized as revenue for some reason? Regardless, it is not clear why this \$1.6M is not included in “other sales from related parties” disclosed on the income statement. We also observe inconsistencies in this disclosure for FY 16. At best, this reflects poor governance and controls at Carvana. At worst, the Company is attempting to hide the extent to which its high-margin F&I income is tied to related parties.

[CVNA FY 17 10-K](#), Pg. 48 and [S-1 \(Apr 23, 2018\)](#), Pg. F-4:

2017: \$8.6M | 2016: \$0.5M

[CVNA FY 17 10-K](#), Pg. 92 and [S-1 \(Apr 23, 2018\)](#), Pg. F-22:

2017: \$8.6M | 2016: \$0.2M

[CVNA S-1 \(Apr 23, 2018\)](#), Pg. 144:

2017: \$10.5M | 2016: \$0.2M

As of and for the Years Ended December 31,

2017 2016 2015

(in thousands, except per share and selected other data)

Consolidated Statements of Operations Data:

Used vehicle sales, net	\$	796,915	\$	341,989	\$	124,972
Wholesale vehicle sales		28,514		10,163		3,743
Other sales and revenues, including \$8,947, \$460 and \$0, respectively, from related parties		33,441		12,996		1,677
Net sales and operating revenues		858,870		365,148		130,392

Master Dealer Agreement

In December 2016, the Company entered into a master dealer agreement with DriveTime, pursuant to which the Company may sell certain ancillary products, including vehicle service contracts (“VSCs”), to customers purchasing a vehicle from the Company. The Company earns a commission on each VSC sold to its customers and DriveTime is obligated by and subsequently administers the VSCs. The Company collects the retail purchase price of the VSCs from its customers and remits the net fee to DriveTime on a periodic basis. During the years ended December 31, 2017 and 2016, the Company recognized approximately \$8.9 million and \$0.2 million, respectively, of commissions earned on VSCs sold to its customers and administered by DriveTime. The commission earned on the sale of these VSCs is included in other sales and revenues in the accompanying consolidated statements of operations.

Master Dealer Agreement

In December 9, 2016, we entered into a master dealer agreement with an affiliate of DriveTime, pursuant to which we may sell certain ancillary products, including VSCs and GAP waiver coverage, to customers purchasing a vehicle from us through our transaction platform. We earn a commission on each VSC sold to Carvana customers and that affiliate subsequently administers the VSC. We also pay a per-contract fee to that affiliate to administer the GAP waiver coverage we sell to our customers. For the years ended December 31, 2017 and 2016, we were paid \$10.5 million and \$0.2 million, respectively, in commissions for VSC sales pursuant to the master dealer agreement. For the years ended December 31, 2017 and 2016, the affiliate of DriveTime received \$6.5 million and \$0.1 million, respectively, pursuant to the master dealer agreement for VSCs sold to our customers and for administering GAP waiver coverage.



VSC-Related Sales Really 100% Gross Margin?

Industry standards dictate that revenue associated with the sale of VSC contracts be recognized as 100% gross margin revenue. However, Carvana notes that DriveTime / SilverRock received \$6.5M and \$0.1M in FY 17 and FY 16, respectively, “pursuant to the master dealer agreement for VSCs sold to our customers and for administering GAP waiver coverage.” CarMax also reports VSC revenue as bearing 100% gross margins, but does not report any similar payments to the administrators of its warranties or GAP insurance products. Is this something that CarMax simply doesn’t report, or do they not similarly reimburse its VSC partners for administering its warranties? If Carvana is paying SilverRock to administer its VSCs, should its VSC-related sales really be a 100% gross margin revenue stream?

Subtracting this \$6.5M payment from Carvana’s FY 17 gross revenue would cut FY 17 GPU by 10%, from \$1,539 to \$1,392.

CVNA FY 17 10-K, Pg. 54

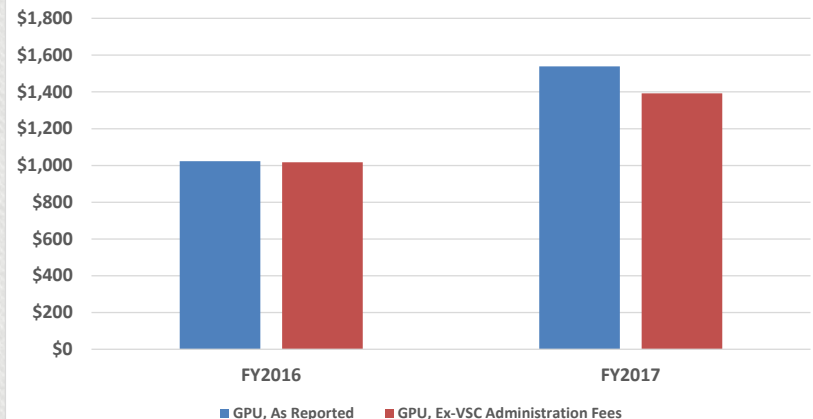
Other sales and revenues, which includes gains on the sales of loans we originate, GAP waiver coverage and sales commissions on VSCs and totaled \$33.4 million and \$13.0 million during the years ended December 31, 2017 , respectively. We expect other sales and revenues to increase with retail units sold and as we improve our ability to offer attractive financing solutions and ancillary products to our customers. Other sales and revenues are 100% gross margin products for which gross profit equals revenue.

CVNA S-1 (Apr 23, 2018), Pg. 144

Master Dealer Agreement

In December 9, 2016, we entered into a master dealer agreement with an affiliate of DriveTime, pursuant to which we may sell certain ancillary products, including VSCs and GAP waiver coverage, to customers purchasing a vehicle from us through our transaction platform. We earn a commission on each VSC sold to Carvana customers and that affiliate subsequently administers the VSC. We also pay a per-contract fee to that affiliate to administer the GAP waiver coverage we sell to our customers. For the years ended December 31, 2017 and 2016, we were paid \$10.5 million and \$0.2 million, respectively, in commissions for VSC sales pursuant to the master dealer agreement. For the years ended December 31, 2017 and 2016, the affiliate of DriveTime received \$6.5 million and \$0.1 million, respectively, pursuant to the master dealer agreement for VSCs sold to our customers and for administering GAP waiver coverage.

GPU: As Reported vs. Ex-VSC Administration Fees

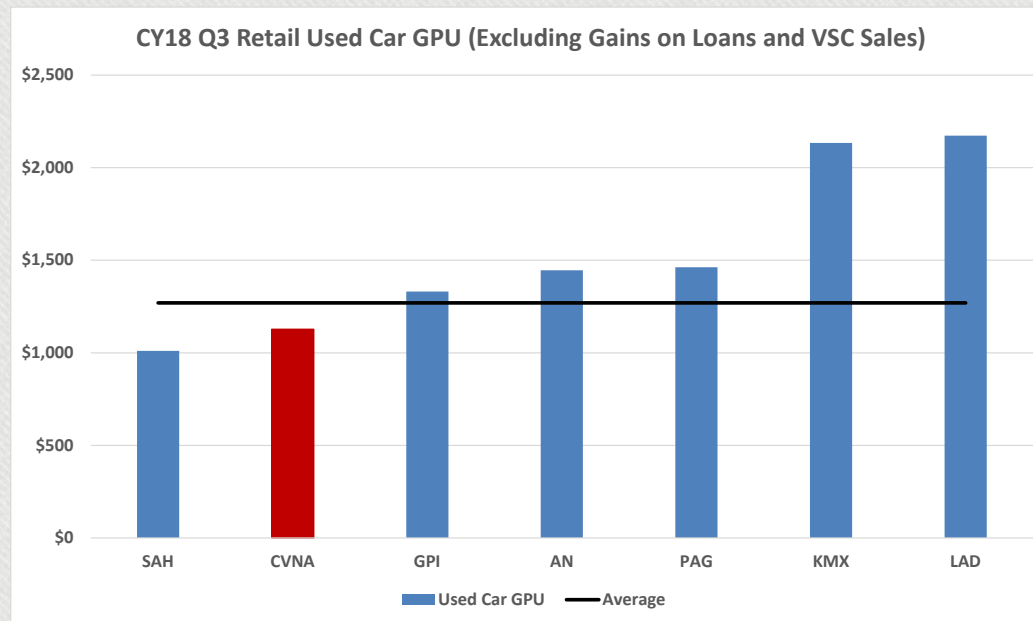




Dubious Economics Of Carvana's Subprime Lending

Carvana GPU Relatively Low When Gain On Loan Sales Are Excluded

Looking more closely at the components of GPU, we observe that gross income from the sale of loans accounts for approximately half of Carvana's per unit gross profit. Although loan sales account for just ~5% of Carvana revenue as of Q3 FY 18, these sales carry gross margins of 100%, and therefore contribute significantly to overall GPU. Carvana's GPU for retail used cars, ignoring the contribution of loan and VSC-related income, is just \$1,127 – among the lowest of any major auto dealer.



While bulls may see this as an opportunity for Carvana to expand gross margins, we note that scale will have little if any impact on GPU, which therefore will not necessarily grow significantly as the Company expands.

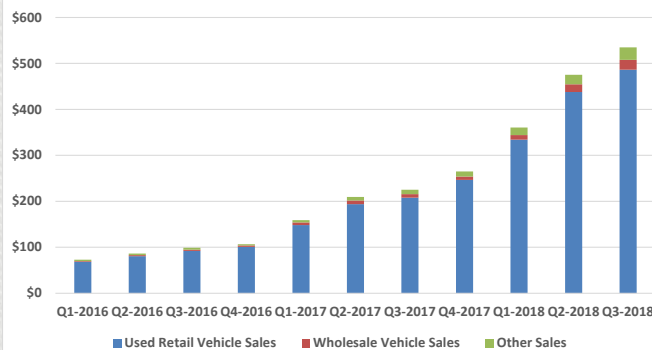
We wonder why Carvana cannot support more competitive GPUs after 5+ years in operation, and having benefitted from the guidance and scale of an experienced used car dealer in its early days. If Carvana generates substandard GPUs today, why should we expect this to be any different going forward?



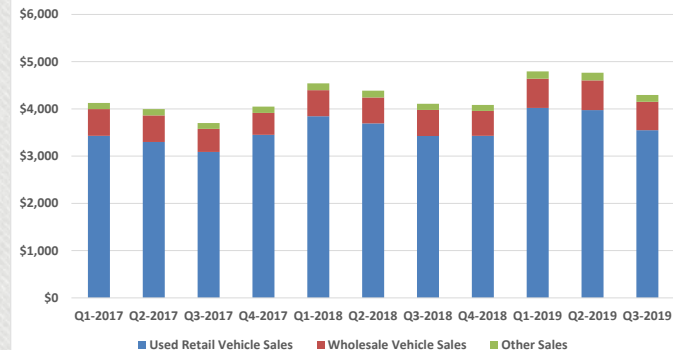
Carvana GPU Driven Largely By Gains From Loan Sales

While finance and insurance (F&I) income drives ~50% of Carvana GPU, less than 20% of CarMax's GPU (Ex-CAF) is attributable to F&I. Not only do we see limited upside in the non-F&I component of Carvana's GPU, but we wonder why Carvana, as a largely-subprime auto dealer, is able to generate such significant F&I income on a per-vehicle basis.

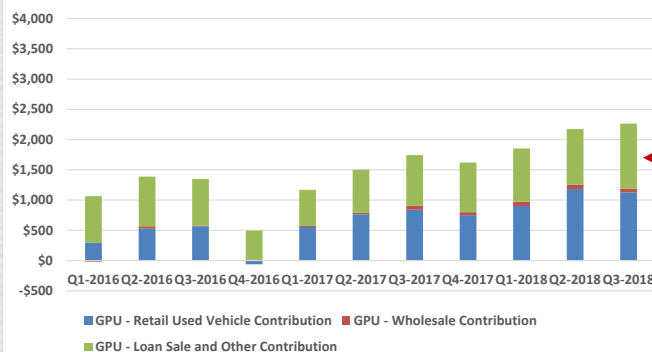
CVNA: Historical Revenue Breakdown



KMX: Historical Revenue Breakdown

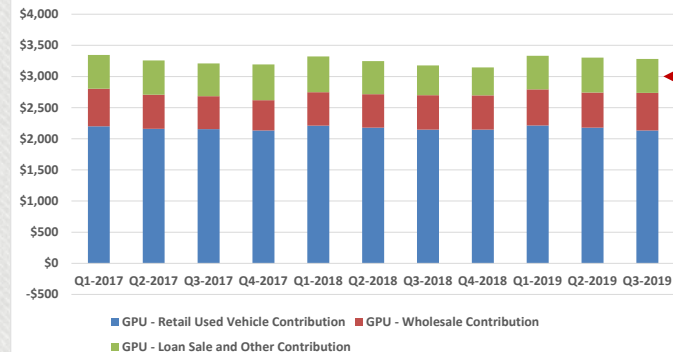


CVNA: Historical GPU Breakdown



CVNA "Other"
Contribution
to GPU:
48%

KMX: Historical GPU Breakdown



KMX "Other"
Contribution
to GPU:
17%

While CarMax also sees its high-margin "Other" sales contribute an outsized share of GPU, Carvana is materially more dependent on this revenue stream for its gross profits. We take this as a negative sign for the health of Carvana: finance companies which generate income from loan sales are generally low-multiple businesses. This also renders Carvana more dependent on the availability of financing.

Reporting Two Businesses With Different Economics As A Single Segment

Note that, despite the fact that its loan sales are such significant drivers of gross profit, management claims to believe that it is appropriate for the business to operate in one reportable segment, whereas CarMax segregates its auto finance business into a separate segment (though it also operates a captive finance company). We believe that Carvana should do the same, and that this would provide greater transparency into its [questionable](#) auto finance-related activities.

Are we really to believe that Carvana operates just one business, and that originating/selling subprime auto loans is not economically different from auto sales?

Segments

Business segments are defined as components of an enterprise about which discrete financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing operating performance. Based on the way the Company manages its business, the Company has determined that it currently operates with one reportable segment. The chief operating decision maker focuses on consolidated results in assessing operating performance and allocating resources. Furthermore, the Company offers similar products and services and uses similar processes to sell those products and services to similar classes of customers throughout the United States (“U.S.”). All revenue is generated and all assets are held in the U.S. for all periods presented.

Source: [CVNA FY 2017 10-K](#)

CarMax reporting of two distinct segments seems more appropriate

CarMax Business

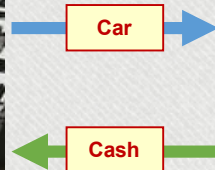
We operate in two reportable segments: CarMax Sales Operations and CarMax Auto Finance (“CAF”). Our CarMax Sales Operations segment consists of all aspects of our auto merchandising and service operations, excluding financing provided by CAF. Our CAF segment consists solely of our own finance operation that provides financing to customers buying retail vehicles from CarMax.

Source: [KMX FY 2018 10-K](#)

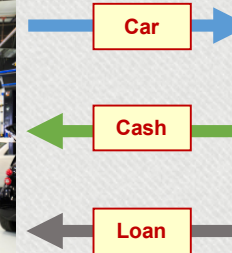
Carvana's Business Model: Not Just Selling Cars, But Originating Loans

Carvana sells its receivables to third parties after originating auto loans associated with its vehicle sales. The availability of financing is vital to Carvana – not just because loan sales support a significant share of its gross profits, but because these sales help to finance its purchases of used cars at auction – and, thus, its inventory build – as it continues to grow.

1. Carvana buys car at auction on floor plan facility, or buys directly from customer



2. Carvana reconditions vehicle, lists vehicle on website

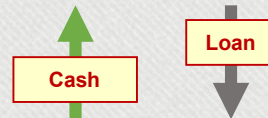


3. Car delivered to customer, or picked up at vending machine



Customer Distribution, per Carvana:
Finance Through Carvana: 70%
Pay in Cash: 15%
Finance Through Third Party: 15%

4. Carvana sells loan (receivable) to third party



Carvana's sales of receivables to third parties are then recorded as a "gain on loan sales."

We believe Ally Financial purchases ~65% of Carvana's loans, with other parties purchasing the remainder (see subsequent slides).

What Kind Of Returns Does Carvana Generate On Its Loan Sales?

Carvana does not explicitly discuss its return on loan sales. However, we can deduce its returns from the Company's financial statements. Carvana's cash flow statement includes its gain on loan sales, which represents the dollar amount of its gains on the sale of auto loans originated. Also included in the cash flow statement is "proceeds from the sale of finance receivables," which represents the total dollar amount which the Company received for selling receivables, gains on loan sales included. By deducting gains on loan sales from proceeds from the sale of receivables, we can determine the notional dollar value of loans underwritten by Carvana in a given period, and can use this as a basis on which to determine the return that it realizes on loan sales.

Since Q1 FY16, Carvana has generated a weighted-average gain on loan sale as a percentage of principal balances sold of 4.0%. In other words, it sells its finance receivables – [largely subprime loans](#) – for 104 par in aggregate.

Carvana Returns On Loan Sales													
(\$, M)	Q1 FY16	Q2 FY16	Q3 FY16	Q4 FY16	FY16	Q1 FY17	Q2 FY17	Q3 FY17	Q4 FY17	FY17	Q1 FY18	Q2 FY18	Q3 FY18
Proceeds From Sale Of Finance Receivables	\$113.2	\$53.5	\$61.7	\$40.8	\$269.2	\$99.1	\$132.8	\$129.7	\$165.6	\$527.3	\$220.4	\$293.5	\$600.5
Proceeds From Sale Of Finance Receivables To Related Parties	1.5	-	-	11.5	13.0	-	-	-	-	-	-	-	-
Adjustment For Refinancing	-	-	-	-	-	-	-	-	-	-	-	-	253.0
Total Proceeds From Sale Of Finance Receivables	114.8	53.5	61.7	52.3	282.3	99.1	132.8	129.7	165.6	527.3	220.4	293.5	347.4
Gain On Loan Sales	\$1.5	\$2.3	\$2.4	\$1.3	\$7.4	\$2.9	\$5.4	\$6.6	\$6.7	\$21.7	\$9.9	\$12.4	\$13.3
Total Proceeds From Sale Of Finance Receivables Less GOS	113.2	51.2	59.4	51.0	274.8	96.2	127.4	123.1	158.9	505.6	210.5	281.0	334.1
GOS AS A % Of Principal Balances Sold	1.3%	4.4%	4.0%	2.5%	2.7%	3.1%	4.3%	5.4%	4.2%	4.3%	4.7%	4.4%	4.0%

What Do These Loans Look Like, And Who Is Buying Them? Management Reluctant To Say

Note that, when first asked about the buyers and the makeup of the loans in Q1 FY 2017, management effectively evaded the question, responding that the FICO score distribution of its financing customers “look a lot like the broader used car market” while providing no real detail on the makeup of its base of borrowers. We find this level of evasiveness in response to such a vital question highly questionable.

Q1 FY 2017 Earnings Call

“Yeah. Hi, guys. Thanks for taking my question. Can you help me out on what's the average FICO score of your buyers that are using financing on your site? And how has that trended as you've doubled since IPO, or actually call it massively more than doubled? Also, can you – it doesn't look like Ally is now taking all of your loans based on my calculations, are you selling to others now as well? And if so, who and what type of loans are you selling to other people than Ally?”

- Nat Schindler, Bank of America

“Yeah. So first on the FICO question, I would say our FICO continues to look a lot like the broader used car market. So if you look at other leading retailers or just kind of used car sales in general, we've got a very similar FICO distribution to any of those retailers and that's been very stable across time, nothing to call out there. Obviously Ally is buying many of our loans and then they're also providing financing to other buyers that we're then able to refinance through these refinancing transactions. That I would say is in concept somewhat similar to the way securitization market kind of works, and we'll probably continue to develop more of those financial buyers over time. And those are some of the structural changes that we're talking about that we believe we'll have access to over the next several quarters we continue to bring more people in. But Ally remains our biggest partner by a long way.”

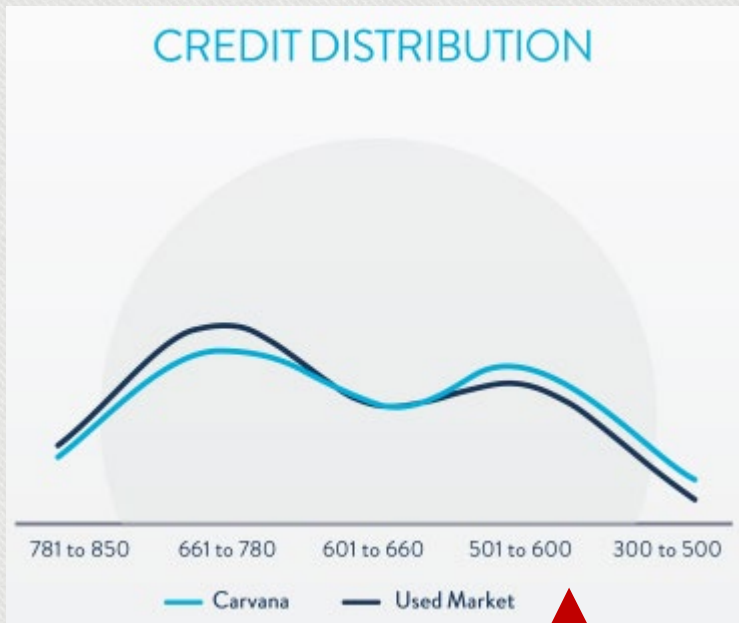
- Ernie Garcia III – CEO, Carvana

Questionable Subprime Lending Math

In its recent [investor day presentation](#), management provided slightly more detail, providing a stylized graph representing the credit distribution of customers who finance through Carvana. Though the graph does not offer rigorous detail, it does show that subprime borrowers are relatively over-represented among Carvana's customer base.

Based on our market intelligence, we believe the weighted average FICO score of customers borrowing through Carvana is approximately 630-640. Yet, during a recent investor conference, Ally claimed that its used auto loans have an average FICO score of 680. We understand that Ally purchases ~65% of Carvana's loans at ~102 par. Given that it buys loans with an average FICO score of 680, the remaining loans purchased by the other buyer must have an average FICO score of ~550 – and, for Carvana to report loan sales at 104 par, the buyer must be paying more than Ally pays for superior loans!

[November 2018 Investor Day Presentation](#)



Why provide only a stylized graph? Why not provide a more comprehensive distribution, since the economics of Carvana's loan sales should depend on it?

Goldman Sachs U.S. Financial Services Conference: 12/5/18

*"So if you look at our used business, the FICO on our used business which represents about 52%, **53% of all the business that we originate today is coming on at an average FICO of 680. Our new business is coming on an average FICO of 700.** So it's very steady across the board. You don't see big barbells in our portfolio, which again gives us confidence when the environment does turn."*

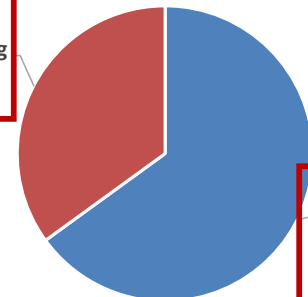
- Jeffrey Jonathan Brown – CEO, Ally Financial

How can Carvana get such attractive terms on subprime loans?

Who is buying these loans on these terms?

Total CVNA: 635 Avg FICO Score, 104 Par

Other (Implied):
550 FICO Avg
108 Par
35%



Ally (Estimate):
680 FICO Avg
102 Par
65%

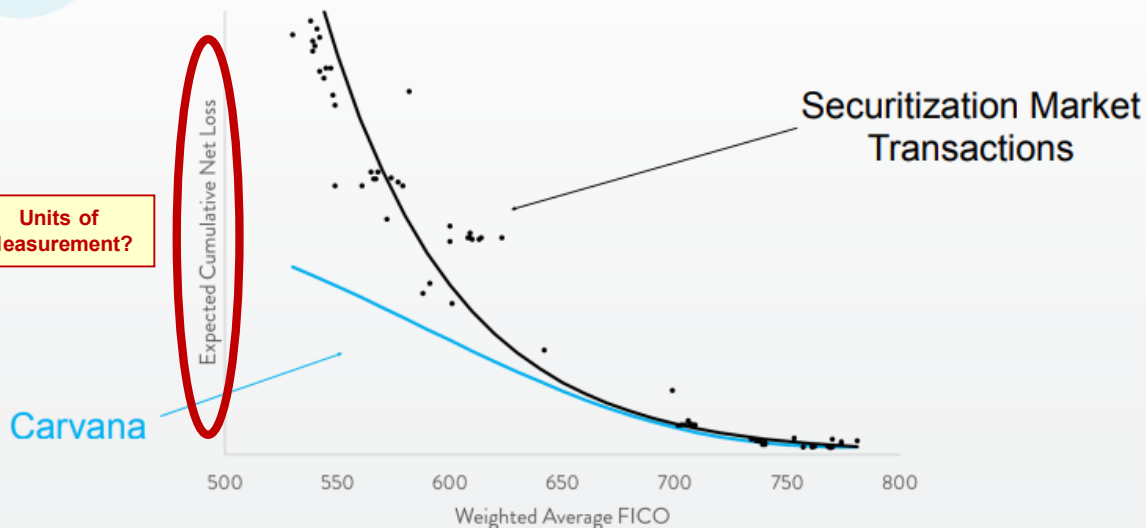


Famous Last Words: “Trust Us”

How does Carvana get such good terms on subprime loans? Management says the secret is in its model: while all other transactions in the automotive securitization market show a close, consistent relationship between FICO score and expected cumulative loss, Carvana just happens to offer better-performing loans at each weighted average FICO score. Of course, management provides no evidence or data to back this up – just another stylized graph (lacking units or scale) representing *“historical and current best estimates of future performance for all loans originated on Carvana’s website.”*

November 2018 Investor Day Presentation

BETTER MODEL → BETTER PERFORMANCE



“Each black dot in the chart represents an automotive securitization market transaction completed in 2018. The black line is the best-fit line of the individual transactions in the chart. The blue line represents the historical and current best estimates of future performance for all loans originated on Carvana’s website.”

Each black dot in the chart represents an automotive securitization market transaction completed in 2018. The black line is a best-fit line of the individual transactions in the chart. The blue line represents the historical and current best estimates of future performance for all loans originated on Carvana’s website.

On what grounds are we to believe that loans originated by Carvana perform better than all other auto loans?

On what grounds are the buyers of its loans to believe this?

Carvana Gains On Subprime Auto Sales: Remarkably Different From Market Standards

It is worth emphasizing just how widely these returns on subprime auto loan sales would vary from peer standards. Consider the economics of CarMax's auto lending. Of customers who finance directly through CarMax, CarMax finances most prime borrowers (average FICO score of 680+) directly through its captive finance arm, CarMax Auto Finance (CAF). Customers with FICO scores averaging 620-680 are financed by third-parties called "Tier 2" providers. These providers either pay a relatively small fee (\$200-\$300) for the right to originate these loans, or pay no fee. Meanwhile, CarMax *pays a fee* to parties which finance its subprime customers (average FICO below 620). These are called "Tier 3" providers.

If CarMax would rather pay other parties to originate loans for its subprime customers than engage in subprime auto loan origination itself, how does Carvana manage to turn a handsome profit on subprime auto loans?

KMX FY 2018 10-K

Generally, credit applications submitted by customers to CarMax are initially reviewed by CAF using our proprietary underwriting standards. Based on that review, CAF makes financing offers designed to create a loan portfolio that meets our targeted risk profile in the aggregate. Applications that CAF declines or approves with conditions are generally evaluated by other third-party finance providers. Third-party providers generally either pay us or are paid a fixed, pre-negotiated fee per contract. We refer to the providers who generally pay us a fee or to whom no fee is paid as Tier 2 providers and we refer to providers to whom we pay a fee as Tier 3 providers. We are willing to pay a fee to Tier 3 providers because we believe their participation provides us with incremental sales by enabling customers to secure financing that they may not otherwise be able to obtain. All fees either received or paid are pre-negotiated at a fixed amount and do not vary based on the amount financed, the interest rate, the term of the loan or the loan-to-value ratio. CAF also provides financing for a small percentage of customers who would typically be financed by a Tier 3 provider.

Previous Transparency Into Receivable Purchasers

2013-15 Purchaser: DriveTime

According to Carvana's [2017 S-1](#), DriveTime purchased all of Carvana's auto loan receivables (at par) from the beginning of 2013 through the end of 2015. Carvana therefore generated no gains or losses from loan sales through the end of 2015. Carvana originated a total of \$24M of receivables in FY14 and \$80M of receivables in FY15.

Carvana Sales of Loans Originated 2013-15

Customer

Carvana



DriveTime

- Controlled by Earnest Garcia II (related party)
- Purchased all CVNA receivables in FY13-15
- Purchased receivables at par

Receivables

Cash (at Par)

Car

Cash

Receivable

CVNA S-1 (Mar 31, 2017), Pg. 136

Finance Receivable Purchase Agreements with DriveTime

From the beginning of 2013 to June 2014, the Company had an agreement with DriveTime, whereby each month DriveTime purchased certain finance receivables that the Company originated. All receivables sold under this arrangement were sold at par. For the period from January 2014 to May 2014, DriveTime purchased \$5.7 million in loans under this arrangement.

In June 2014, the Company entered into the DriveTime Receivable Purchase Agreement to sell DriveTime finance receivables that the Company originates in conjunction with the sale of vehicles. During the period from June 2014 through December 31, 2015, the Company sold all of its finance receivables to DriveTime at par under this arrangement and recognized no gain or loss on the sales. As of December 31, 2015, the Company had approximately \$1.5 million in receivables due from DriveTime for the sales of finance receivables included as receivables due from related party on the accompanying consolidated balance sheet. During the year ended December 31, 2016, DriveTime purchased a portion of the finance receivables the Company originated representing approximately \$11.5 million of gross outstanding principal balance, resulting in a gain on loan sale from related party of approximately \$0.3 million. As of December 31, 2016, DriveTime is not obligated to make any additional purchases under the agreement.

Previous Transparency Into Receivable Purchasers

2016 Purchaser: Delaware Life

Starting in January 2016, Carvana sold its auto finance receivables to “certain trusts” serviced by DriveTime. The trusts, in turn, issued notes to Delaware Life Insurance Company (“Delaware Life”), an insurer controlled by Mark Walter. As a >5% shareholder in Carvana, Walter – who indirectly controls CVAN Holdings, LLC, which in turn owns ~9% of Carvana – was disclosed as the note purchaser in Carvana’s SEC filings.

Carvana Sales of Loans Originated: 2016

Customer

Carvana

Receivables

Cash

“Certain Trusts”

Notes

Cash



CVNA S-1 (Mar 31, 2017), Pg. 138

Transfer and Note Purchase and Security Agreements

In January 2016, we entered into transfer agreements pursuant to which we sell automotive finance receivables meeting certain underwriting criteria to certain trusts who each engage Carvana as Trust Administrator of the trusts and DriveTime as servicer of the receivables. DriveTime engaged GFC Lending LLC, an affiliate of DriveTime, to perform certain subservicing functions with respect to these automotive finance receivables, payment for which would be made from proceeds received by DriveTime from the third party purchasers. Pursuant to certain note purchase and security agreements entered into in connection with the transfer agreements, the trusts issued notes to certain parties, including Delaware Life Insurance Company (“Delaware Life”), in which Mark Walter has a substantial ownership interest. Mark Walter also indirectly controls CVAN Holdings, LLC and has non-controlling ownership interests in other note purchasers under the note purchase and security agreements. Delaware Life also serves as administrative agent and paying agent on behalf of the note purchasers. Under the transfer agreements and initial note purchase and security agreements, we could sell up to an aggregate of \$200.0 million in principal balances of automotive finance receivables in this manner. In September 2016, we amended the agreements to sell up to \$230.0 million in principal balances of the finance receivables. As of December 31, 2016, we have sold all \$230.0 million of automotive finance receivables, including the approximately \$72.4 million of automotive finance receivables repurchased from DriveTime.

Who Purchases Carvana's Loans Now? 2016-18: Ally And "Certain Third Party Purchasers"

In Dec 2016, Carvana announced an agreement with Ally under which Ally would provide up to \$375M in financing for Carvana's auto loans. In a concurrent agreement, Carvana secured another \$292.2M of financing from "certain third party purchasers." Ally subsequently committed up to \$1.5B in financing capacity for 2018, but has since [cut back its lending capacity](#) to \$1.25B for 2019. We note that, interestingly, this decision came just as Ally's auto finance president and DriveTime/Carvana supporter [Tim Russi resigned from Ally](#) in April 2018, shortly after DriveTime's losses reportedly surged.¹

Carvana Sales of Loans Originated: 2016-18

Customer

Carvana



[CVNA S-1 \(Apr 23, 2018\)](#), Pg. F-24

Master Purchase and Sale Agreement and Master Transfer Agreement

In December 2016, the Company entered into a master purchase and sale agreement (the "Purchase and Sale Agreement") and a master transfer agreement (the "2016 Master Transfer Agreement") pursuant to which it sells finance receivables meeting certain underwriting criteria to certain third party purchasers, including Ally Bank and Ally Financial (the "Ally Parties"). Through November 2017 under the Purchase and Sale Agreement and the 2016 Master Transfer Agreement, the Company could sell up to an aggregate of \$375.0 million, and \$292.2 million, respectively, in principal balances of finance receivables subject to adjustment as described in the respective agreements. On November 3, 2017, the Company amended its Purchase and Sale Agreement to increase the aggregate amount of principal balances of finance receivables it can sell from \$375.0 million to \$1.5 billion. Also on November 3, 2017, the Company terminated the remaining capacity under the 2016 Master Transfer Agreement and replaced this facility by entering into a new master transfer agreement (the "2017 Master Transfer Agreement") with a third party under which the third party has committed to purchase up to an aggregate of \$357.1 million in principal balances of finance receivables.

1. [DriveTime's losses were reportedly surging](#), Jan 2018. Ally's auto finance president and DriveTime supporter, Tim Russi, later left Ally in [April 2018](#)



The Third-Party Purchaser: “Sonoran Auto Receivables Trust”

According to the Master Transfer Agreement, the “third-party purchaser” – the trust to which Carvana sells its receivables – is now called “Sonoran Auto Receivables Trust” (“Sonoran”). [As discussed](#), with Ally the only other party currently purchasing Carvana loans, we deduce that Sonoran is buying the Company’s subprime loans at a premium.

Note that, according to management’s recent [“Explainer on Recent Refinancing Transactions,”](#) Sonoran is funded both by Ally and “non-Ally parties.” However, management is reluctant to discuss the source of the non-Ally funding behind the trust.

FY16 Master Transfer Agreement (Amended), For Receivables Sold in FY17

AMENDED AND RESTATED MASTER TRANSFER AGREEMENT

between

CARVANA AUTO RECEIVABLES 2016-1 LLC

as Transferor

and

SONORAN AUTO RECEIVABLES TRUST 2016-1

DATED AS OF MARCH 6, 2017

FY17 Master Transfer Agreement, For Receivables Sold in FY18

MASTER TRANSFER AGREEMENT

between

CARVANA AUTO RECEIVABLES 2016-1 LLC

as Transferor

and

SONORAN AUTO RECEIVABLES TRUST 2017-1

DATED AS OF NOVEMBER 3, 2017

[Carvana 101 – Explainer on Recent Refinancing Transactions](#)

Carvana 101 – Forward Flow Agreements

Carvana sells the loans it originates on its website through two primary channels: whole loan sales to Ally under a Master Purchase and Sale Agreement (MPSA) and whole loan sales to a trust under a Master Transfer Agreement (MTA).

What is the Master Purchase and Sale Agreement (MPSA)?

The Master Purchase and Sale Agreement is an agreement that allows Carvana to sell a portion of its loans directly to Ally. The Master Purchase and Sale Agreement was initially signed in December 2016 and has been amended from time to time since then.

What is the Master Transfer Agreement (MTA)?

The Master Transfer Agreement allows Carvana to sell a portion of our loans to a trust that is funded by Ally and non-Ally parties. The Master Transfer Agreement was initially signed in December 2016 and has been amended or replaced from time to time since then.

Why does Carvana have two separate agreements?

The two separate agreements are designed to meet the risk, return, and regulatory preferences of our partners. Loans sold under the MPSA tend to have higher credit scores and lower losses than loans sold under the MTA.

Forward Flow Agreements as of November 2, 2018

	MPSA	MTA
Type of sale	Whole loan sales to bank	Whole loan sales to trust
Carvana counterparty	Ally	Forward Flow Trust
Can be refinanced?	No	Yes
Initial funding commitment	\$1,250M Ally	\$350M Ally; \$104.5M non-Ally
Total funding commitment	\$1,250M Ally	\$1,050M Ally; \$314M non-Ally
Commitment Termination Date	November 1, 2019	November 1, 2019

For additional details on these agreements, please see our public filings.

Direct Loan sales to Ally, per the Master Purchase and Sale Agreement



Sales to Ally and “Non-Ally parties” through a trust, per the FY18 Master Transfer Agreement

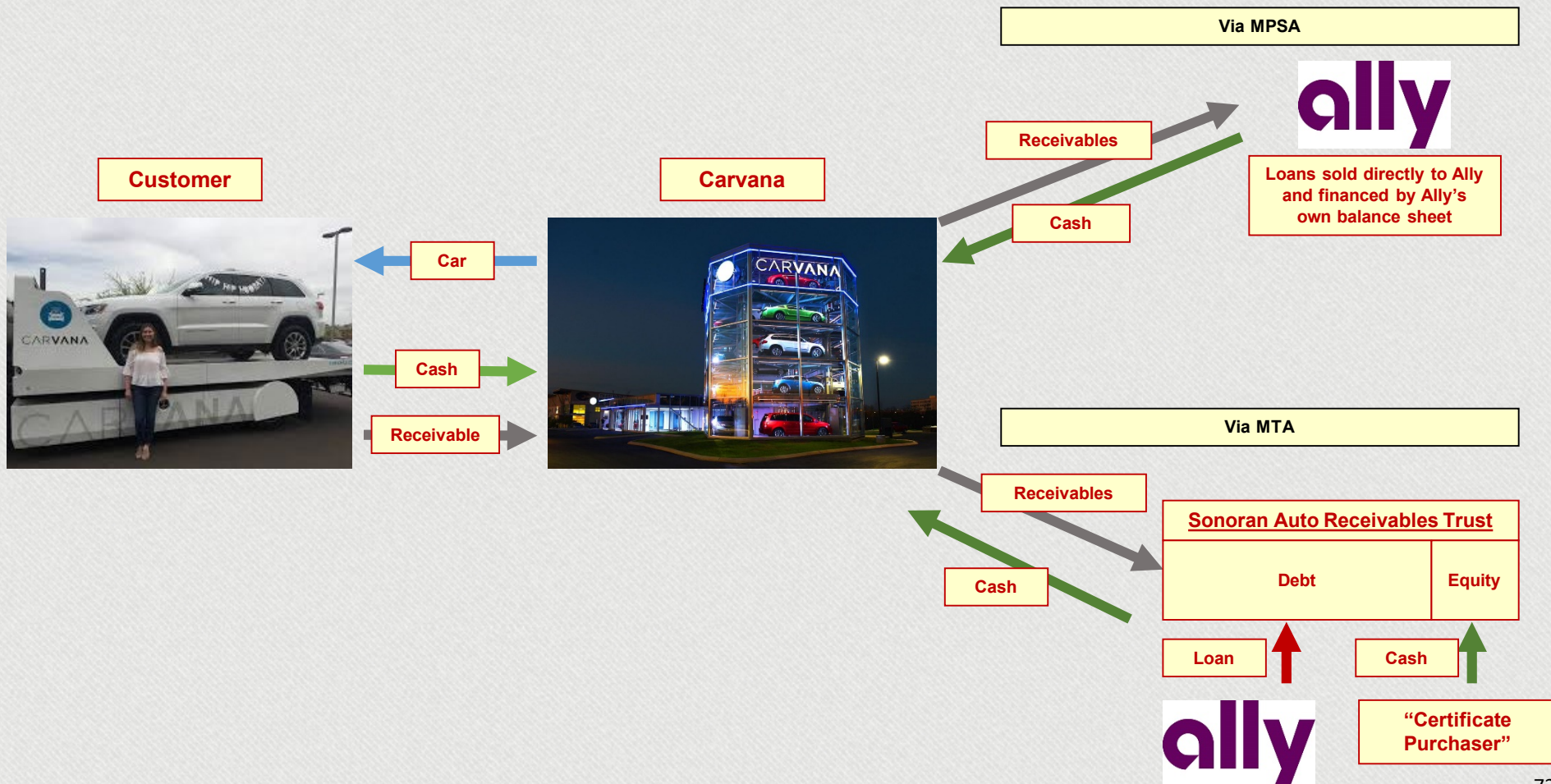
TRANSFER AGREEMENT

This TRANSFER AGREEMENT (as amended, restated, supplemented or otherwise modified from time to time, this “Agreement”), dated as of December 21, 2018, is by and between Carvana Auto Receivables Depositor LLC, a Delaware limited liability company (“Carvana Auto”), as the seller (the “Seller”), and Sonoran Auto Receivables Trust 2018-1 Term, a Delaware statutory trust (the “Trust”), as the purchaser (the “Purchaser”).

Carvana Funding Structure, December 2016 To Present

Carvana is clearly hugely dependent on Ally for financing. But it is also dependent on the equity holders in Sonoran Auto Receivables Trust, which purchases Carvana's subprime auto loans.

Who are the “non-Ally parties” behind Sonoran who seem willing to pay a premium for subprime loans? And why is management so reluctant to share this information despite questioning from investors?



Is Ally Aware Of Carvana's Subprime Economics?

As another major financial backer of Carvana's lending business, one might expect that Ally would be aware of the close ties between Carvana and its other financial backers, as well as the suspicious economics of its subprime auto lending. However, the relationship between Carvana and Ally was until recently managed by Tim Russi, who, as President of Auto Finance at Ally, also managed the lender's relationship with DriveTime and provided financing to the company even as it suffered growing losses. Russi has since departed Ally as of April 2018.

Does the recent reduction in Ally's financial commitment to Carvana suggest that its new auto finance team is applying greater scrutiny to its relationship with the Company? Is the new team as comfortable with Carvana's subprime auto lending as was Russi and his team?

As DriveTime's Losses Surge, Ally Financial Extends Credit Line

▲ William Hoffman January 25, 2018 ■ Capital Markets, Credit Performance

Ally Financial Inc. is opening a \$750 million line of credit to make loans through DriveTime Automotive's network of used car dealers, the companies announced in a joint press release Wednesday.

Following a year in which DriveTime saw losses surge 387%, the agreement is meant to help the company extend more into near-prime segments, according to the release.



Via DriveTime.com

[Source](#)

DETROIT Jan. 24, 2018 - Ally Financial today announced that it has entered into an agreement to purchase retail contracts from DriveTime, the nation's second largest vehicle retailer focused solely on used vehicles. Under the agreement, Ally will make up to \$750 million available to DriveTime for the purchase of retail contracts over the coming year.

"We're excited to work with DriveTime to provide committed financing that frees up capital it can use to grow its business," said Tim Russi, president of auto finance at Ally. "Our expertise allows us to support DriveTime in a way that complements our well-established indirect model."

[Source](#)

Tim Russi to leave Ally Financial

JACKIE CHARNIGA

April 19, 2018 01:00 AM

Tim Russi, the Ally Financial auto finance president who led many digital initiatives and helped expand the lender's dealership reach, is leaving the post, effective immediately.

[Source](#)

Sonoran Providing Financing Just As Carvana Needed It Most

Notably, Sonoran increased its funding capacity to \$1.4B in Q3 – just as Ally cut its bulk financing capacity (excluding its financing of Sonoran of \$350M) from \$1.5B to \$1.25B, and cut its early termination option from 180 days to 90 days. With this, Sonoran is set to surpass Ally as Carvana's largest lender.

“Commitment Amount” means the sum of (i) ~~\$1,500,000,000~~ **\$1,250,000,000** less 62.5% of the aggregate Outstanding Principal Balance of all retail installment sales contracts which would be Eligible Contracts under the definition thereof sold by the Seller during the Commitment Period to parties other than the Transferor plus (ii) the Outstanding Principal Balance of a Receivable that had been previously included in a Receivables Pool and was repurchased, remediated and resold to the Purchasers in a subsequent Receivables Pool.

Ally cuts direct buying of receivables

2.2 Amendments to Section 2.4 (Termination Options). Section 2.4(a)(iv) and Section 2.4(b)(xvi) of the Master Purchase and Sale Agreement are hereby amended as set forth below by inserting each term thereof which is double underlined in the place where such term appears below and deleting the stricken text:

(a) (iv) for any reason with ~~one hundred eighty (180)~~ **ninety (90)** days' prior written notice to the Purchaser.

Ally cuts early termination option

(b) (xvi) for any reason with ~~one hundred eighty (180)~~ **ninety (90)** days' prior written notice to the Transferor; or

Source: [3rd Amendment](#)

FIRST AMENDMENT, dated as of November 2, 2018 (this “Amendment”), to the Master Transfer Agreement, dated as of November 3, 2017 (the “Master Transfer Agreement”), between **SONORAN AUTO RECEIVABLES TRUST 2017-1**, a Delaware statutory trust (the “Trust”) and CARVANA AUTO RECEIVABLES 2016-1 LLC, a Delaware limited liability company (the “Transferor”).

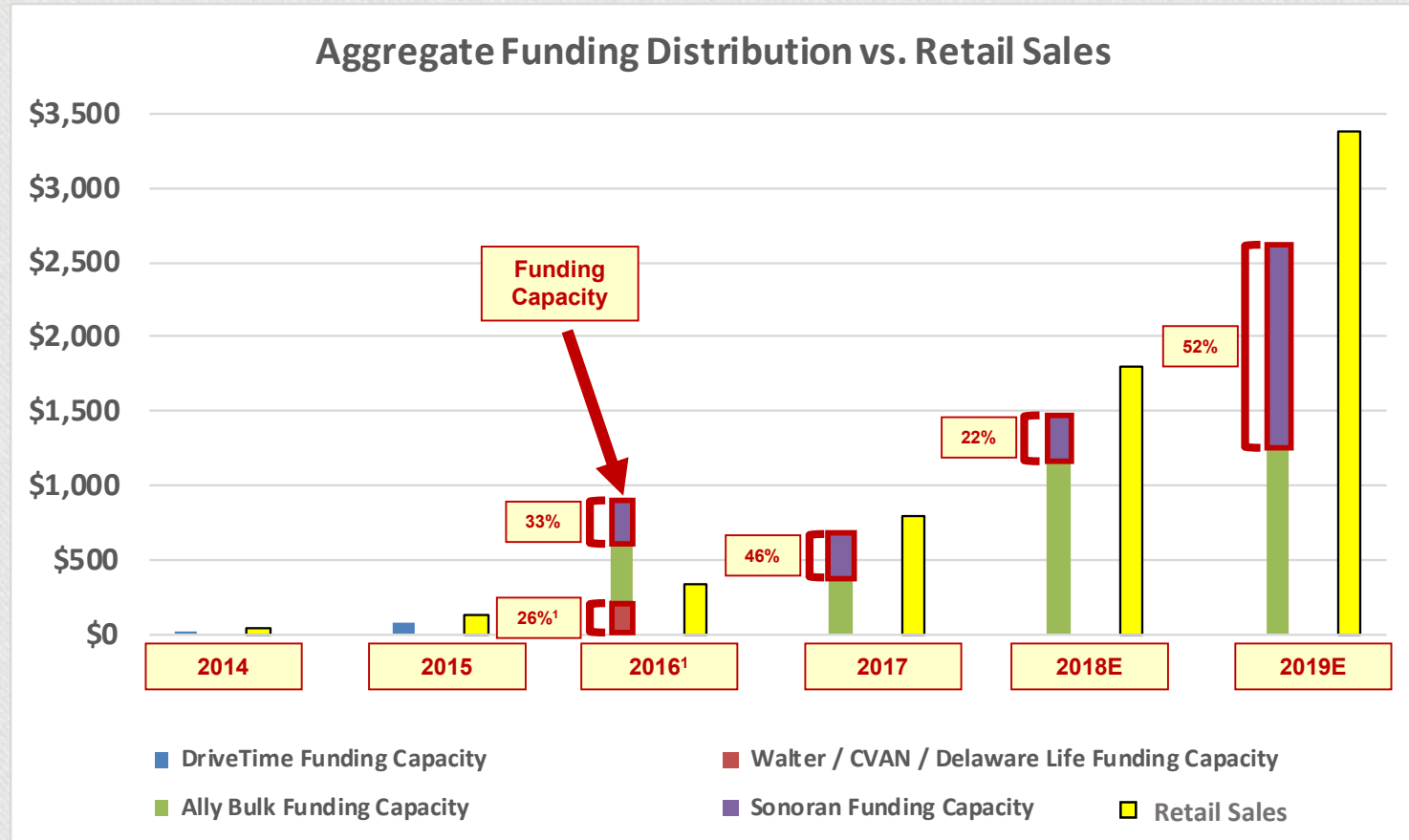
“provided that (i) prior to November 2, 2018, in no event shall the Trust be obligated to purchase from Transferor hereunder Receivables with a principal amount exceeding an aggregate principal balance as of each Receivable's applicable Closing Date of \$357,142,857.14 plus the aggregate principal balance (as of each Receivable's applicable resold Closing Date) of all Receivables previously sold to the Trust, repurchased, remediated, and resold to the Trust and (ii) on and after November 2, 2018, in no event shall the Trust be obligated to purchase additional Receivables from Transferor hereunder if, after giving effect to such additional purchase, the aggregate principal balance as of the applicable Closing Date of all Receivables purchased from Transferor on or after November 2, 2018 would exceed **\$1,363,636,363.64** plus the aggregate principal balance (as of each Receivable's applicable resold Closing Date) of all Receivables previously sold to the Trust, repurchased, remediated, and resold to the Trust; provided further that the Trust shall have the right to terminate its agreement to purchase each such Receivables Pool described in Section 3.1(e) by providing ninety (90) days' prior written notice of its intent to terminate to the Transferor.”

Sonoran fills funding hole left by Ally with \$1.36B commitment

Source: [1st Amendment](#)

Sonoran Set To Become Majority Funder Of Carvana Loans In 2019

With Ally to provide up to \$1.25B in bulk financing capacity in FY19, Sonoran will exceed 50% of Carvana's total funding capacity in FY19.

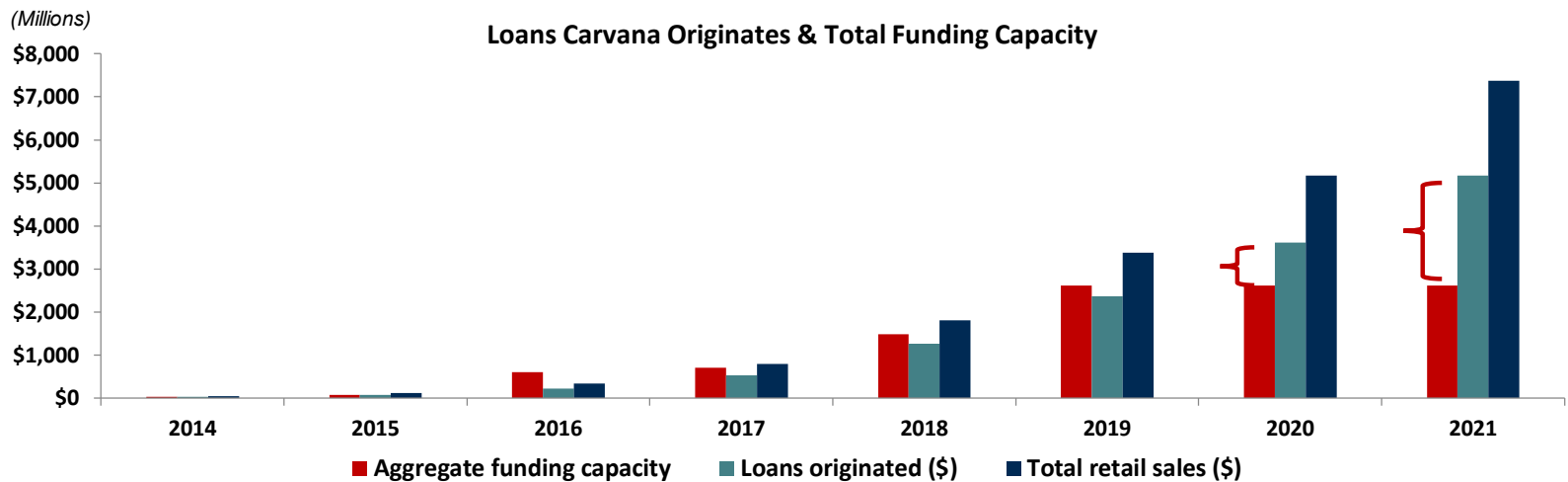


1. Ally and Sonoran began providing financing in December of 2016. The Walter / CVAN / Delaware Life financing comprised all of Carvana's funding capacity for much of FY16.



Capital Needs Will Become More Dire If Carvana Continues To Grow As Analysts Expect

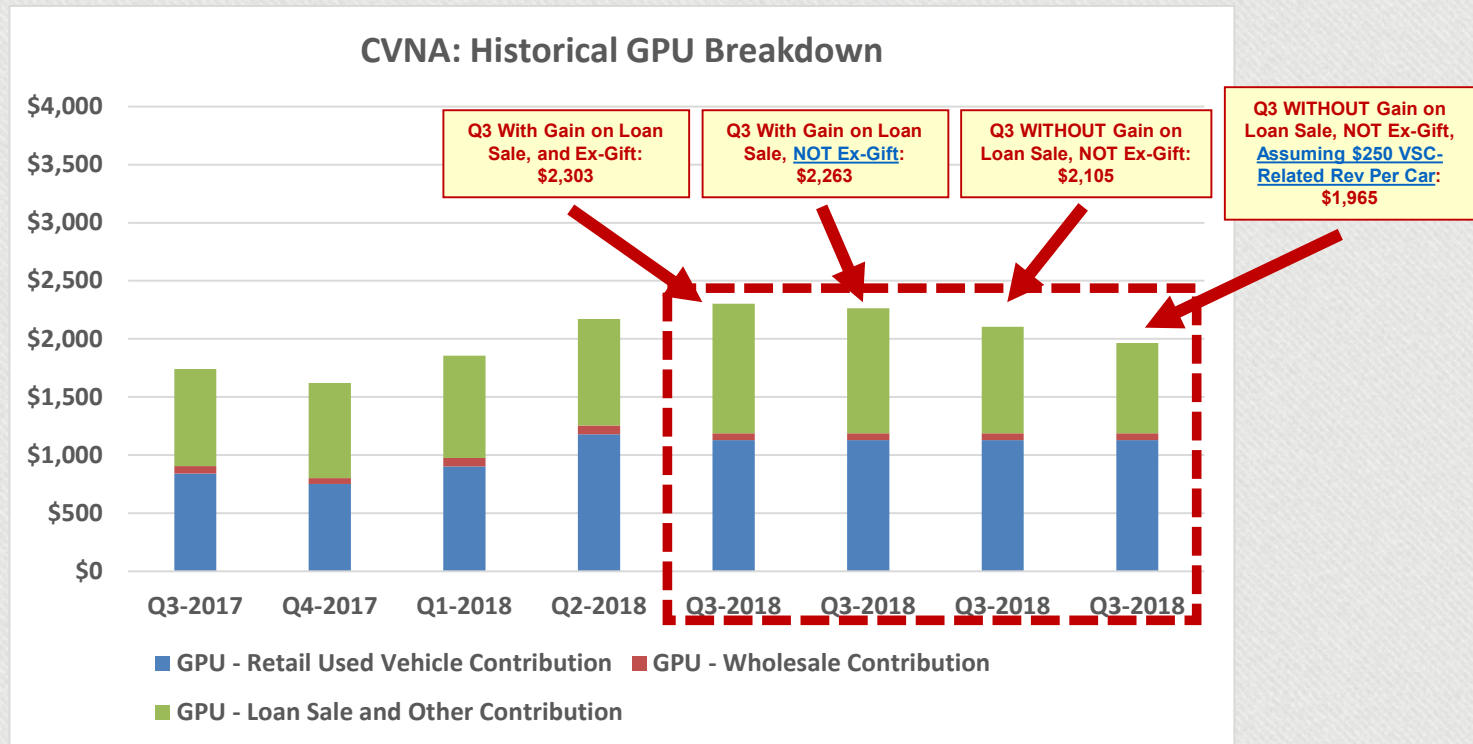
Under current loan commitments and projected financing needs given consensus sales growth estimates, Carvana will exceed its current borrowing capacity by ~\$1B by FY 2020. This deficit would increase to \$2.5B in FY 2021. Just as Carvana's historical lenders are being replaced by an obscure trust backed by non-disclosed entities, Carvana's capital needs are intensifying rapidly. We are concerned about management's ability to continue to obtain financing as it continues to grow the business. Why would future lenders be willing to finance subprime auto loans on terms similar to what Carvana has gotten thus far?



Total Capacity to Sell Receivables								
(\$, M)	2014	2015	2016	2017	2018E	2019E	2020E	2021E
Total Retail Sales	\$41	\$125	\$342	\$797	\$1,801	\$3,376	\$5,166	\$7,376
Loans Originated	24	80	224	529	1,261	2,363	3,616	5,164
As a % of Retail Sales	58%	64%	66%	66%	70%	70%	70%	70%
Excess (Deficit) Capacity	\$0	\$0	\$381	\$171	\$220	\$250	(\$1,002)	(\$2,550)

Finding New Ways To Milk Profits From Loans: Odd Gain From Refinancing Agreement

In Q3 FY 2018, management realized a \$4M gain from “facilitating the refinancing of a \$236M pool of Carvana-originated finance receivables that we had previously sold.” As part of Carvana’s finance-related sales, this revenue carried a 100% gross profit margin and flowed directly into GPU, boosting GPU by 7%. In a [follow-up note](#), management described this transaction as facilitating the refinancing of loans originated and sold by Carvana into “fixed pools” rather than “forward flow commitments,” which are supposedly given less-favorable treatment by ratings agencies and support lower rates of return for investors. All told, Carvana generated a riskless ~2% return on a transaction which appears entirely outside the purview of its business. The justification for this transaction seems questionable to us.



Without this refinancing income and without excluding the gift expense, management would have missed GPU guidance of \$2,300 by ~10%, and GPU would have contracted sequentially. Further assuming VSC-related revenue per used retail vehicle sold of \$250 (recall our [earlier discussion](#)), GPU would have been a full 15% lower, at \$1,965. Instead, management hit its \$2,300 GPU guidance almost perfectly.

Questionable Justification For “Monetization Of Finance Receivables”

In its follow-up note, management claimed that it was “uniquely positioned” to conduct this refinancing as the originator of these loans, since “financial institutions who fund consumer auto loans typically do a substantial amount of due diligence on loan pools and their originators before funding.” However, we believe that another financial institution would have been able to conduct this riskless transaction for a lower fee. Why was this transaction conducted by Carvana for a ~2% fee instead?

Further, in its Q3 FY18 10-Q, management states explicitly that the Company does not have the right to “purchase or sell finance receivables it has previously sold under the 2017 Master Transfer Agreement.” Why was Carvana able to conduct a transaction which its financial statements appear to prohibit in clear and unambiguous terms?

Carvana 101 – Explainer on Recent Refinancing Transactions

Why doesn't the certificate purchaser arrange its own refinancing?

Financial institutions who fund consumer auto loans typically do a substantial amount of due diligence on loan pools and their originators before funding. As originator of the loans sold under the MTA, Carvana is uniquely positioned to assist financial institutions, independent rating agencies, and other parties with due diligence, which may include a detailed review of data, technology, and operations.

Is this enough to justify a riskless 2% fee?

CVNA Q3 FY 2018 10-Q

In August 2018, the Company purchased finance receivables that it previously sold to a purchaser's trust under the 2017 Master Transfer Agreement for a price of approximately \$253.0 million and immediately resold such finance receivables to another trust owned by the same purchaser for the same price under a new transfer agreement. The Company is not obligated to, nor does it have a right to, purchase or sell finance receivables it has previously sold under the 2017 Master Transfer Agreement. The transaction completed in August 2018 was entered into in connection with a refinancing by the purchaser and was entered into independently from the terms of the 2017 Master Transfer Agreement. The Company received a fee of approximately \$4.0 million for arranging and participating in the transaction, which is included in other sales and revenues in the accompanying unaudited condensed consolidated statements of operations.

A very odd disclosure. Is Carvana even permitted to engage in such transactions?

How Much More “Monetization Of Finance Receivables” Can Carvana Support?

Carvana completed a similar transaction on December 28, 2018: this time receiving a \$2.3M fee for refinancing \$134M of loans – good for another ~1.6% riskless return. Carvana has now facilitated the refinancing of \$387.4M of loans out of aggregate principal balances of \$478.8M sold as of Q3 FY18. This leaves remaining principal balances yet to be refinanced of just \$91.3M, which would support just \$1.5M more in refinancing fees – good for an incremental \$55 of GPU ON 27,500 retail units sold, or about 2.5% of Carvana’s pre-monetization GPU in Q3, versus 7% in Q3 FY18. While Carvana will presumably try to conduct similar refinancings on future loans originated, management now has a far smaller reserve from which to create profits from the monetization of receivables, and with which to make up any shortfalls in GPU.

As Of Q3 FY18	(\$, M)	
Aggregate Principal Balances Sold	\$479	→ Supported \$4M gain (1.6%)
Principal Balances Refinanced, Q3 FY18	\$253	→ Supported \$2.3M gain (1.6%)
Principal Balances Refinanced, Q4 FY18	\$134	
Remaining Principal Balances	\$92	
Prospective Fees @ 1.6% Return	\$1.5	

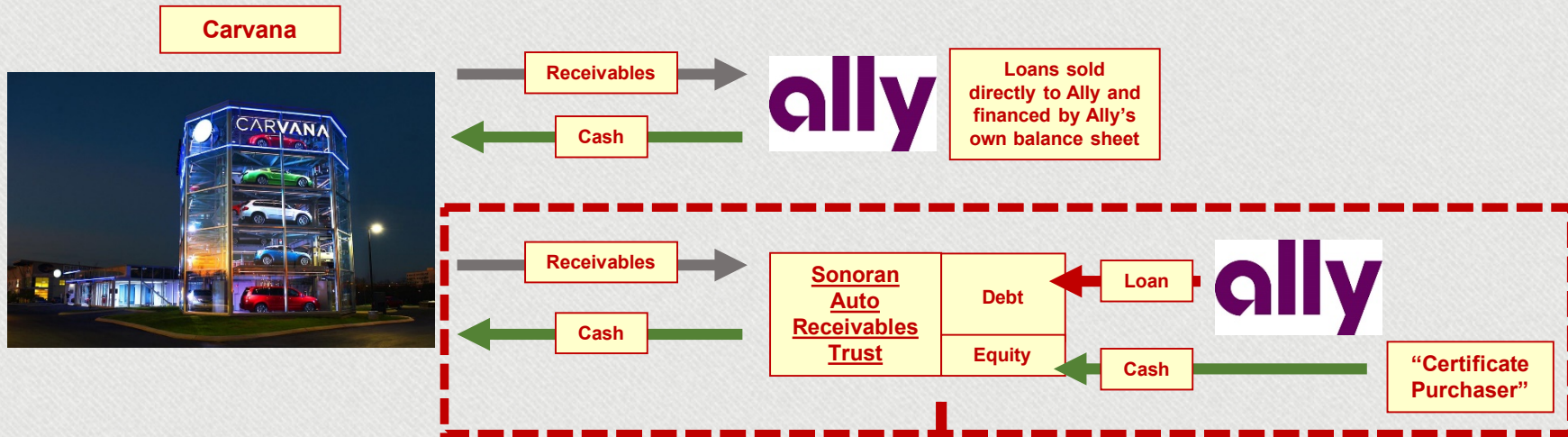
Should Carvana continue to grow, this could become a more consistent driver of GPU. However, we question its legitimacy and, hence, its sustainability as a source of income.



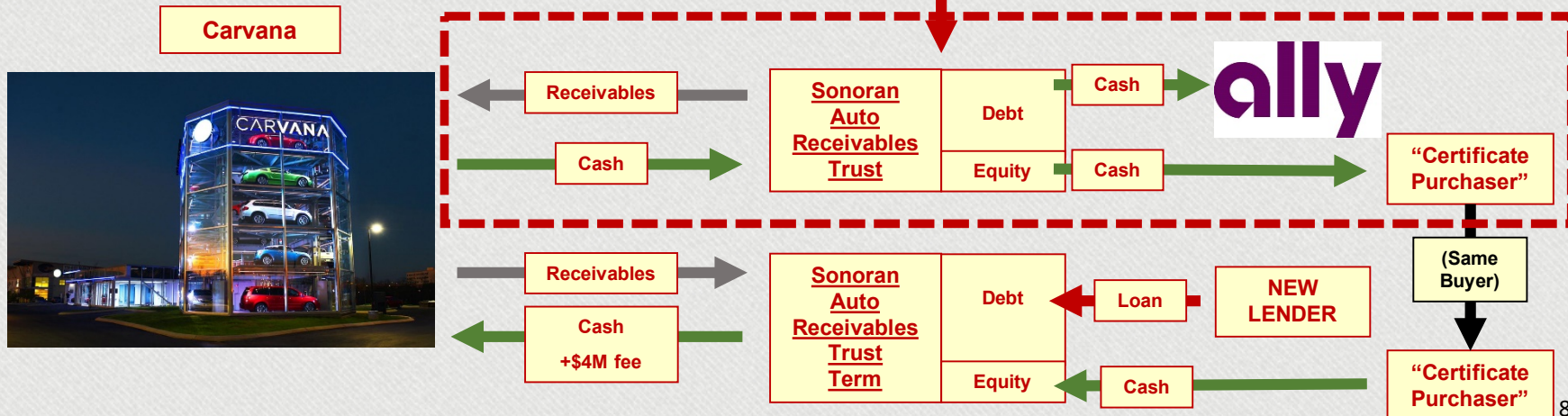
Refinancing Transaction Structure

The structure of both Carvana's initial loan sales and its recent refinancings is depicted below. Note that Ally is replaced as the lender to the trust.

Initial Loan Sale (See Our [Earlier Slide](#))



Refinancing The Trust: Receivables Flow Back To Carvana, And Then To The New Trust



Management Refuses To Reveal Identity Of Uneconomical Buyers Despite Investor Questioning

Given the puzzling economics of Carvana's subprime auto loan sales and its heavy dependence on these sales for gross profit, we believe that management should be more transparent about the identity of the new trust's lender: who would realistically be willing to pay a premium for subprime auto loans? Indeed, investors appear to have asking about its identity since the refinancing was first announced. Yet management continues to be coy about the trust's source of funding.

Carvana 101 – Explainer on Recent Refinancing Transactions

Who initiated the refinancing transaction?

As part of our long-term financing plan, we are frequently in contact with financial institutions who have an interest in funding consumer auto loans. In the case of our Q3 and Q4 refinancing transactions, we identified a large asset manager interested in offering senior debt financing on a fixed pool of loans at terms that were significantly better than those available to the forward flow trust. We approached the certificate purchaser in the forward flow trust to determine whether they would be interested in purchasing certificates in a new trust with better senior debt financing and higher yielding certificates, and the certificate purchaser agreed.

Can these really be
"attractive" terms on
subprime auto
receivables purchased at
a premium?

Who could be willing to
buy these loans?

Q. Investor question: Who is the senior debt provider in your refinancing transactions?

A. The senior debt provider in our Q3 and Q4 refinancing transactions is an asset manager with over \$100 billion in assets under management. The senior debt provider is not a related party. We are not able to name the senior debt provider due to confidentiality terms in our agreement. Moreover, we would likely not name the partner absent those terms due to the factors described above.

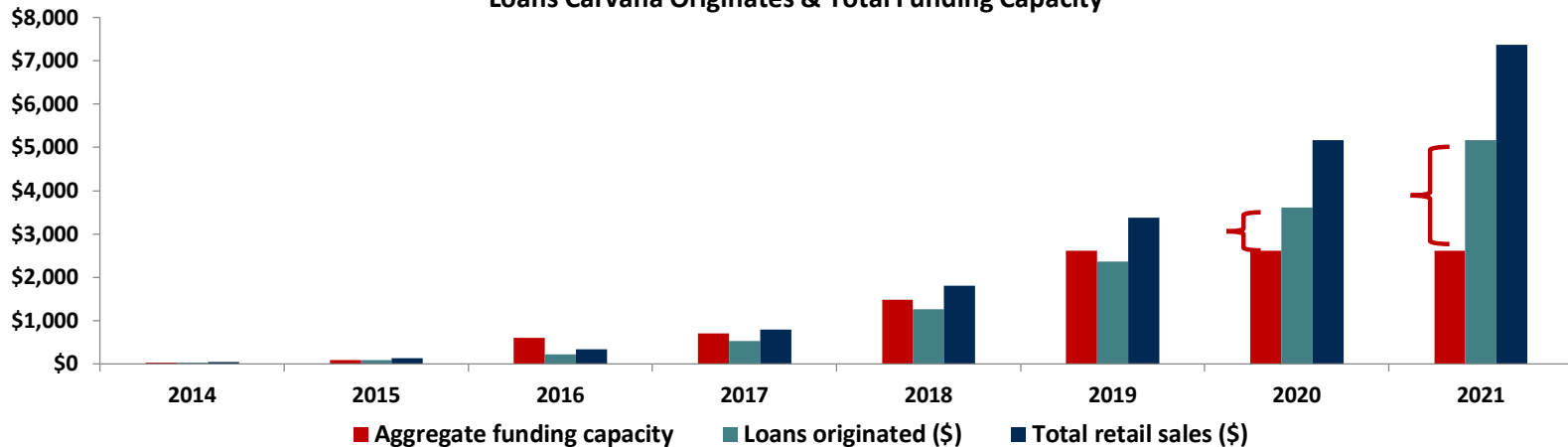
Continued unwillingness
to disclose the identity of
its financial backers
despite questions from
investors



Carvana Recap: Can Carvana's Uneconomical Loan Selling Arrangements Persist As It Grows Increasingly Dependent On New Financing?

After taking such an exhaustive view of Carvana's funding situation, it's worth taking a step back to understand the significance of all of this detail. Carvana is currently [burning hundreds of millions in cash](#) and hugely dependent on third-party funding to finance its growth. Until now, Ally has been the primary provider of third-party financing for Carvana, but it has likely primarily absorbed Carvana's highest-FICO loans. Meanwhile, the Company appears to be realizing [vastly off-market returns](#) on its [sale of subprime auto loans](#) to its other financial backers – yet management won't reveal their identities, leaving us wondering whether this funding is sustainable. Perhaps they are wagering that the company can achieve self-sustaining profitability before capital runs dry – but, with Ally now beginning to reduce its funding, we believe that Carvana's heavy dependence on irrational third-party financing could catch up with it before it can turn a sustainable profit. Any of the concerns which we illustrate in this report – the Company running afoul of consumer protection laws, issuing GAP waiver coverage in states in which it is not authorized to do so, etc. – could also cause capital providers to flee preemptively, creating a cash crunch which could ultimately sink Carvana.

Loans Carvana Originates & Total Funding Capacity



Is anyone prepared to step up to the plate to fill this funding gap as Carvana continues to fail to turn a profit?

Will the credit cycle turn for the worse between now and then, which could make capital extremely hard to come by for a junk-rated borrower like Carvana?

Will evidence of concerning behavior by the Company cause buyers of Carvana's receivables – or stock – to pull out?



Governance Concerns



Ernest Garcia II: A History Of Fraudulent Activity

Ernest Garcia II, founder of DriveTime and father of Carvana CEO Ernie Garcia III, [pleaded guilty](#) to bank fraud charges in 1990 alongside his partner – and now DriveTime CEO – Raymond Fidel for their roles in the collapse of Lincoln Savings and Loan Association. They ultimately avoided jail time by testifying against their boss, Charles Keating. However, multiple charges have been leveled against him since, including a [lawsuit](#) from shareholders in Ugly Duckling (now DriveTime), another dealing with credit application leaks, and [another](#) concerning bribes of CarMax salesmen to divert business. Most recently, in 2014, DriveTime was [fined \\$8M](#) by the Consumer Finance Protection Bureau for “making harassing debt collection calls.” Importantly, we note that Carvana makes no mention of Garcia II’s background despite his status as controlling shareholder.

Lincoln S&L Figure Pleads Guilty to Fraud : Crime: Ernest C. Garcia II admits acting to help the thrift hide its ownership of some risky desert land in Arizona.

October 31, 1990 | JAMES S. GRANELLI | TIMES STAFF WRITER

The bank-fraud charge alleges that Garcia was a "straw borrower" used by executives at Lincoln and its parent firm, American Continental Corp. in Phoenix, to hide the true ownership of 1,000 acres of desert land outside Phoenix, according to federal prosecutors.

"This type of white-collar scheme--using 'straw borrowers'--is of particular concern because it is designed to conceal the true nature of the financial transactions involved," said U.S. Atty. Gen. Dick Thornburgh in a prepared statement from Washington. "In the process, federal regulators are deceived, the institution is defrauded and the taxpayers are left to foot the bill."

The convoluted arrangement involving Garcia and a partnership called Westcontinental Mortgage & Investment Corp. was the first of 10 transactions regarding property in a planned development called Hidden Valley Ranch.

Garcia is accused of obtaining a \$30-million line of credit from Lincoln by "creating the materially false and misleading impression" that the borrowing was not related to the simultaneous purchase of the desert acreage.

The Hidden Valley property was bought in 1987 by Westcon, a partnership with few assets created and run by a friend of Garcia to accommodate the transaction.

The information charges that, instead of being an arms-length transaction, the sale of the desert land for \$14 million actually was an illegal "quid pro quo" for Garcia's line of credit. Westcon put \$3.5 million down--money regulators claim came from Lincoln through Garcia--and borrowed the remaining amount from a Lincoln subsidiary.

Regulators, who had been pressing Lincoln to rid itself of risky holdings in undeveloped Arizona desert land, doubted both the values Keating put on the land and the arrangements he used to sell some of it.

Westcon never repaid the \$10.5-million loan it received from Lincoln for the balance of the purchase price. In a letter, the company asked that the property be returned to its rightful owner, suggesting that the partnership was a straw borrower.

In civil lawsuits, regulators allege that Lincoln claimed "phantom profits" of \$82 million from the 10 deals--including \$11 million on the Westcon deal--and improperly paid American Continental \$31 million for income tax on the deals. Lincoln, however, didn't owe any taxes, regulators said.

[Source](#)

IN THE COURT OF CHANCERY OF THE STATE OF DELAWARE

IN AND FOR NEW CASTLE COUNTY

IN RE UGLY DUCKLING CORPORATION)
SHAREHOLDERS DERIVATIVE AND) Consolidated C.A. No. 18746-NC
CLASS LITIGATION)

BACKGROUND OF THE LAWSUIT

On March 20, 2001, a shareholder of Ugly Duckling filed a derivative complaint, on behalf of the Company, in the Delaware Court of Chancery (the "Court") captioned *Berger v. Garcia, et. al.*, C.A. No. 18746-NC (the "Berger Complaint"). The Berger Complaint sought relief against all of the members of the Ugly Duckling board of directors (the "Board"): Ernest C. Garcia, II ("Garcia"), Gregory B. Sullivan ("Sullivan"), John N. MacDonough, Christopher D. Jennings and Frank P. Willey; and Verde Investments, Inc. ("Verde"), a shareholder of Ugly Duckling and alleged alter ego of Garcia. It alleged that the Board, aided and abetted by Verde, breached fiduciary duties owed to Ugly Duckling and its shareholders in connection with certain transactions between the Company, on the one hand, and its Chairman and majority shareholder, Garcia, and various entities controlled by Garcia, on the other hand. The Berger Complaint sought to void the challenged transactions and recover compensatory damages for the Company.

[Source](#)

CarMax alleges DriveTime organized scheme against it

By Mike Sunnucks -

Apr 19, 2009, 9:00pm MST **Updated** Apr 16, 2009, 11:42am EDT

CarMax Auto Superstores Inc. is suing Phoenix-based rival DriveTime Car Sales Inc., alleging the company bribed or tried to bribe CarMax salespeople to divert business to DriveTime.

[Source](#)

Woefully Inexperienced C-Suite

All Carvana senior executives are 40 years old or younger. Only Chief Product Officer Daniel Gill had experience as a senior executive of a company prior to joining Carvana – with a start-up which, according to [Crunchbase](#), raised no more than \$25M. CEO Garcia has spent only two years of his professional life outside of companies controlled by his father. CFO Mark Jenkins was most recently an economics professor, and had no prior public company experience in finance, accounting, or treasury, which are traditional breeding grounds for public company CFOs. He is supported in the treasury function by an individual who filed for personal bankruptcy, calling into question his suitability to manage financial affairs for a public company.

Spruce Point does not believe management is best suited to run a large, capital-intensive public company.

Executive / Role / Education	Age	Concern	C-Suite Experience?	Mgmt Experience Outside of Family Business?	Mgmt Experience Outside of Start-Ups?	Experience in Auto Industry?	Experience With Public Company?	Direct Corporate Finance Experience?
Ernie Garcia III / CEO / Stanford	35	Son of a felon, possibly installed as puppet by father			X	X		X
Mark Jenkins / CFO / Stanford	39	Non-traditional CFO						
Joel Lewison / Treasury (1)	NA	Filed for personal bankruptcy, 6 years with DriveTime				X		X
Benjamin Huston / COO / Harvard/Stanford	35		X	X				X
Ryan Keeton / CBO / Harvard	40							
Daniel Gill / CPO / Stanford	35		X	X				X
Paul Breaux / GC	34							

Source: Carvana and Spruce Point opinion

1) Lewison filed for Ch 7 bankruptcy in the [US Bankruptcy Court, District of Arizona](#). According to his bio and DriveTime, he was a [Senior Treasury Analyst](#) and [Assistant Director](#)

In Spruce Point's Opinion, Carvana Board Members Are Not Entirely Independent

Outside of Michael Maroone, an experienced auto dealer executive with companies including AutoNation, no member of the Board of Directors is both independent and deeply experienced in the industry. Greg Sullivan served as an executive with DriveTime from 1995-2007. Though Ira Platt spent several years in automotive financing early in his career, the vast majority of his career has been spent in banking and venture capital, and he was a director of DriveTime from 2014-17. And Dan Quayle – hey, what's he doing here?

Board of Directors Experience and Qualifications					
	Independent?		Extensive Auto Industry Experience?	Meaningful Business Experience?	Prior Management Experience?
	Independence According To Carvana	Spruce Point Concern			
Ernie Garcia, III				X	
Michael Maroone	X		X	X	X
Ira Platt	X	Director of DriveTime		X	X
Greg Sullivan	X	DriveTime, 1995-2004 (including President)	X	X	X
Dan Quayle	X	Quayle and his son, Ben, have received political donations from the Garcias		X	

CVNA FY 2018 14-A - Proxy Statement

Independence Status

The listing standards of the New York Stock Exchange (the "NYSE") require that, subject to specified exceptions, each member of a listed company's Audit and Compensation and Nominating Committees be independent and that Audit Committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act.

Our Board has determined that each of our non-employee directors, including our director nominee Ira Platt, meet the requirements to be an independent director. In making this determination, our Board considered the relationships that each non-employee director has with the Company and all other facts and circumstances that our Board deemed relevant in determining his independence, including beneficial ownership of our Class A common stock.

Independence; Board Mix

Our Board has an effective mix of independent and management directors. It is composed of four independent Directors and our current Chairman and Chief Executive Officer, Ernie Garcia.

Ira Platt
Audit Committee Member
Compensation & Nominating Committee Member

Greg Sullivan
Audit Committee Member
Compensation & Nominating Committee Member

Dan Quayle
Compensation & Nominating Committee Member

Political Donations To A Member Of The Board?

Upon further review, Quayle's presence on the board seems a bit less mystifying...
Quayle received political donations from Garcia II years ago. More recently, both Garcia II and Garcia III have given financial support to his son, Ben.

How independent and objective can Dan Quayle really be as a Board member?

Category	Contributor	Occupation	Date	Amount	Recipient
Money to Candidates	GARCIA, ERNEST C MR II PHOENIX, AZ 85016	Ugly Duckling Corp.	06-17-1999	\$1,000.00	Quayle, Dan (R)
Money to Candidates	GARCIA, ERNEST PHOENIX, AZ 85018	INFORMATION REQUESTED	02-18-2010	\$2,400.00	Quayle, Ben (R)
Money to Candidates	GARCIA, ERNEST III PHOENIX, AZ 85018	.INFORMATION REQUESTED	07-23-2010	\$2,400.00	Quayle, Ben (R)
Money to Candidates	GARCIA, ERNEST II PHOENIX, AZ 85018	DRIVETIME	10-20-2010	\$2,400.00	Quayle, Ben (R)

Source: [OpenSecrets.org](https://www.opensecrets.org)

Case Studies: Bankruptcies And Fraud Typically Attract Former High Ranking U.S. Politicians

It is a common tactic of aggressively promotional management teams to bring on board members with name recognition and/or government connections, and who can bestow the company with some level of prestige and legitimacy, but who lack the experience and industry knowledge necessary to serve as an effective member of the board.

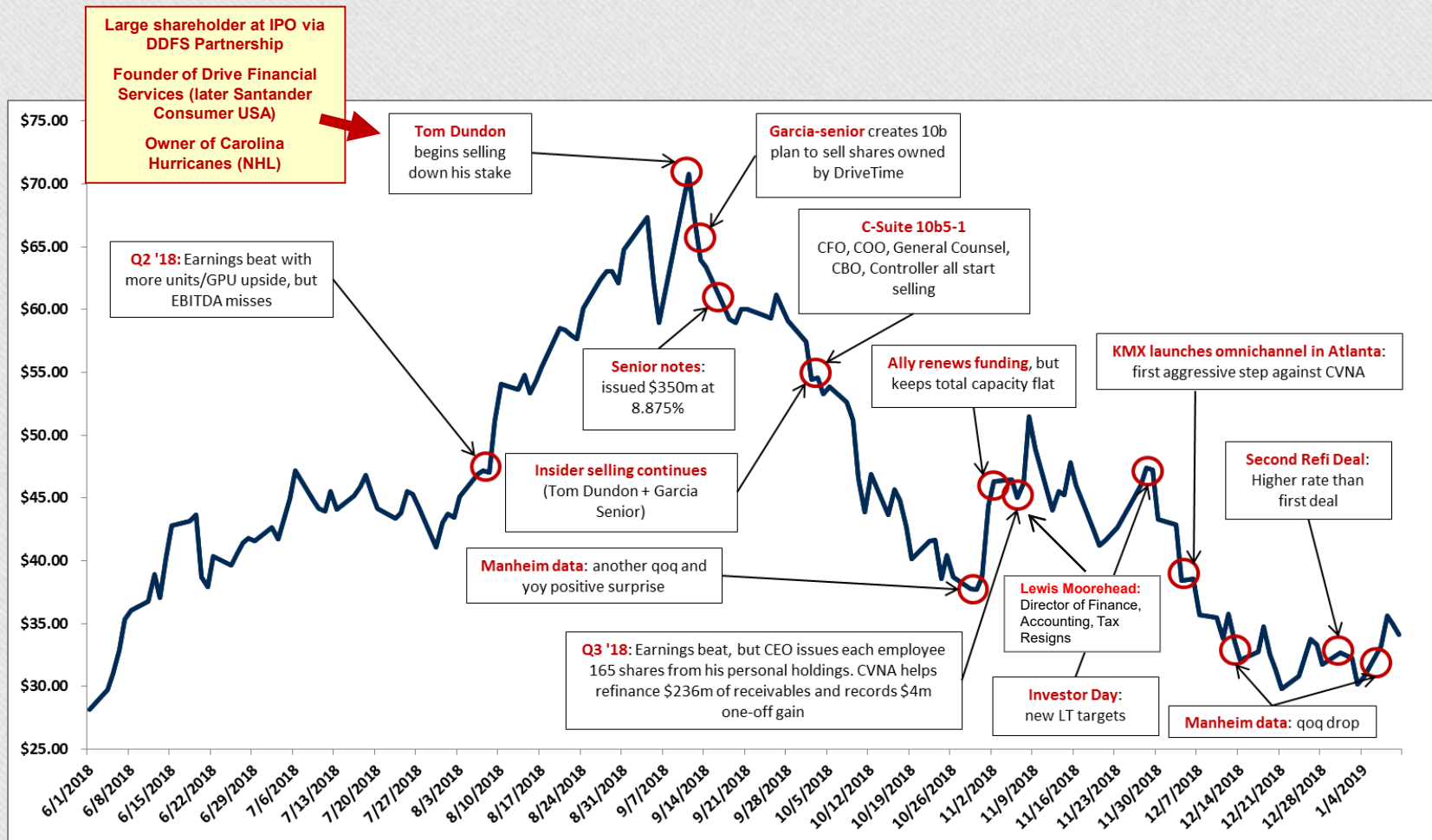
Blue-Chip U.S. Politicians And Gov't Officials: A Leading Indicator of Shareholder Wealth Destruction

Person	Notable Positions	Board Member Of...	Outcome
Condoleezza Rice	National Security Advisor (2001-04) Secretary of State (2005-09)	Nasdaq: KiOR	Bankruptcy, Allegations Of Fraud and SEC Subpoena
Wesley Clark	General, U.S. Army (1992-2000)	Various Chinese frauds and Failed U.S. Companies	ABC News Investigation
Roderick M. Hills	Chairman of the Securities and Exchange Commission from 1975 to 1977 Counsel to the President of the United States in 1975	Waste Management	Massive Fraud
Clifford L. Alexander	Secretary of the Army (1977-81)	MCI/WorldCom	Fraud and Bankruptcy
Henry Kissinger	National Security Advisor (1969-75) Secretary of State (1973-77)	Theranos	Fraud
William Perry	Secretary of Defense (1994-97)		
George Shultz	Secretary of the Treasury (1972-74) Secretary of State (1982-89)		
Bill Frist	U.S. Senator (1995-2007)		
Sam Nunn	U.S. Senator (1972-97)		
Gary Roughead	Chief of Naval Operations (2007-11)		
James Mattis	Secretary of Defense (2017-18) U.S. Central Command (2010-13)		



Insiders Selling Aggressively

Insiders have been selling aggressively over the last six months, just as Ally cut back on its lending to Carvana and as earnings became more dependent on one-off drivers.



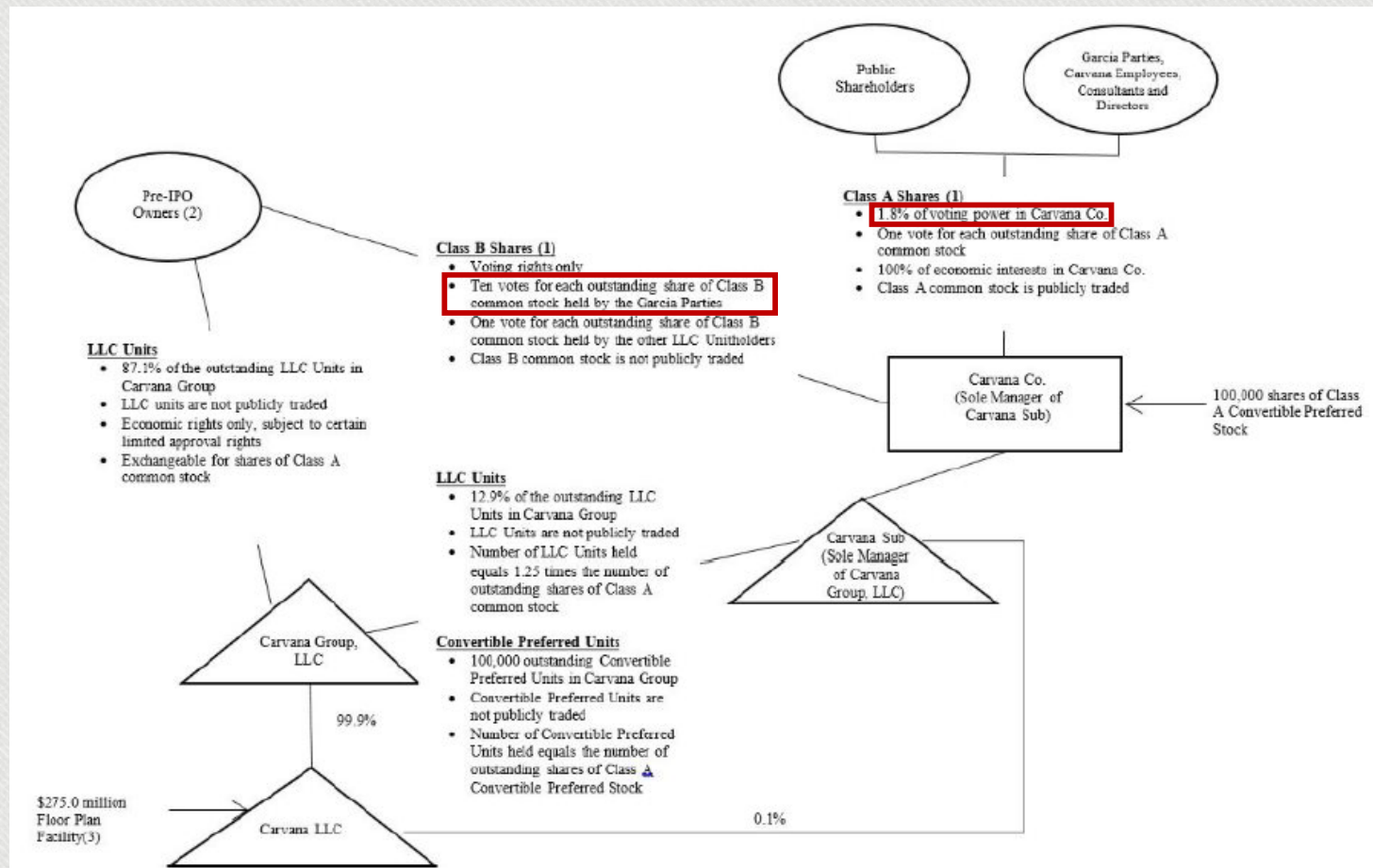
Note: While [DriveTime's losses were reportedly surging](#) in Jan 2018, Ally extended it a credit line. Ally's auto finance president and DriveTime supporter, Tim Russi later left Ally in [April 2018](#)



Convoluted Shareholder Structure Favoring Insiders

A bizarrely complex organizational structure gives Earnest Garcia II significant economic and voting control over Carvana. Meanwhile, the public float (fully diluted for all share classes) is limited by Garcia's 70% stake, together with the large stakes of other sizable early investors. We are concerned that insiders – the Garcias in particular – designed this structure to benefit themselves over public shareholders.

CVNA FY 2017 10-K



Convolutd Shareholder Structure Favoring Insiders

Ernest Garcia II's significant holdings of Class B shares gives him 90% of total voting rights. While Class B shares themselves confer no economic rights, they are fungible into Class A shares when combined with an "LLC Unit," which were distributed prior to the IPO. This leaves Garcia with effective economic control of Carvana of 70%. The IPO structure is a convenient way for Garcia to monetize his fortune in the used car business, where his prior attempt take DriveTime public failed. He also does not have to disclose his troubled legal past as he is not formally on the management team.

Carvana: Distribution Of Voting Rights					
	Class A Shares	Class B Shares			Total
		Garcia	Others	Total	
Shares Outstanding (M)	38.8	70.3	35.5	105.8	144.7
Voting Rights per Share	1.0	10.0	1.0	-	-
Total Voting Power	38.8	703.5	35.5	739.0	777.8
As a % of Total Voting Rights	5%	90%	5%	95%	100%

As shareholders, we would not feel comfortable with the Company being so heavily controlled by insiders – especially one convicted of felony bank fraud.



Valuation And Downside Risk

A Used Auto Dealer Covered By Tech Analysts: Do They Understand The Business?

Sell-side firms vary widely in how they assign CVNA to industry groups: some categorize it liberally as a “technology” or “business services” name, while others more appropriately group it with other auto-related stocks.

Importantly, we note that technology and internet analysts tend to assign a relatively higher price target to the stock, while auto analysts, “industrial technology” analysts, etc. tend to be more conservative in their valuations. We believe that auto-oriented analysts are much more likely to understand Carvana as a business than are tech or business services analysts, and believe that their lower valuations, while still excessive on the whole, are likely better-informed than those of their tech counterparts.

Firm	Analyst	Industry Coverage Group	Recommendation	Price Target
B. Riley FBR, Inc.	Sameet Sinha	Technology (Internet, SaaS, Cloud)	Buy	\$76.00
Wolfe Research	Chris Bottiglieri	Consumer Retail and Business Services	Outperform	73.00
Stephens Inc.	Rick Nelson	Retail/Hardlines	Equalweight	66.00
Baird	Colin Sebastian	Internet and Interactive Entertainment	Outperform	65.00
JMP Securities	Ronald Josey	Internet	Outperform	64.00
Barrington Research	Gary Prestopino	Business Services	Outperform	62.50
Wells Fargo Securities	Zachary Fadem	Retail/Hardlines	Outperform	57.00
Consumer Edge Research	Derek Glynn	Automotive, Consumer Transportation	Equalweight	55.00
Wedbush	Seth Basham	Hardlines Retail	Neutral	52.00
Craig-Hallum Capital	Steven Dyer	Industrial Technology	Hold	40.00
BMO Capital Markets	Daniel Salmon	Media & Internet	Market Perform	35.00
Morgan Stanley	Armintas Sinkevicius	Autos and Shared Mobility	Underweight	23.00
AVERAGE				\$55.70
UPSIDE				~75%

Carvana Trades In-Line With Asset-Light E-Commerce Firms, Not Auto Dealers

CVNA trades much more like an e-commerce firm than an auto dealer – yet its business model is much closer to that of other auto dealers. Carvana buys vehicles, maintains inventory, manages a logistics network, originates loans, etc. – much like a traditional auto dealer. Other auto sales sites like CarGurus are simply lead-generation businesses and maintain no inventory of their own.

While both are “auto e-commerce” sites, their business models are so different that they cannot be considered good comps.

CVNA should trade in-line with other auto dealers, not asset-light auto e-commerce sites.

Name (Ticker)	Stock Price 2/11/2019	Adj Ent. Value	'19E-'20E		P/E		Enterprise Value				Price/Book	Net Debt/ 19E EBITDA	Dividend Yield
			Sales	EPS			EBITDA		Sales				
			Growth	Growth	2019E	2020E	2019E	2020E	2019E	2020E			
Car Dealers													
CarMax (KMX)	\$60.69	\$24,167	6.4%	9.0%	12.2x	11.2x	17.1x	16.5x	1.3x	1.2x	3.3x	10.1x	0.0%
Autonation (AN)	\$37.18	\$9,462	-0.4%	-3.2%	8.2x	8.4x	9.9x	10.1x	0.4x	0.4x	1.4x	6.8x	0.0%
Penske Auto (PAH)	\$41.97	\$9,530	2.2%	3.4%	7.5x	7.2x	11.4x	11.0x	0.4x	0.4x	1.4x	6.9x	3.6%
Lithia Motors (LAD)	\$84.10	\$5,224	2.4%	4.4%	8.0x	7.7x	11.1x	11.0x	0.4x	0.4x	1.8x	7.0x	1.4%
Group 1 Auto (GPI)	\$57.75	\$4,142	-0.7%	-0.7%	6.3x	6.3x	11.1x	11.3x	0.4x	0.4x	1.0x	8.3x	1.8%
Asbury Auto (ABG)	\$69.02	\$3,042	0.6%	4.2%	8.0x	7.7x	9.7x	9.7x	0.4x	0.4x	2.9x	5.4x	0.0%
Sonic Auto (SAH)	\$15.30	\$3,044	-3.4%	-31.3%	7.6x	11.0x	10.5x	9.4x	0.3x	0.3x	0.8x	9.2x	1.6%
		Max	6.4%	9.0%	12.2x	11.2x	17.1x	16.5x	1.3x	1.2x	3.3x	10.1x	3.6%
		Average	1.0%	-2.0%	8.2x	8.5x	11.5x	11.3x	0.5x	0.5x	1.8x	7.7x	1.2%
		Min	-3.4%	-31.3%	6.3x	6.3x	9.7x	9.4x	0.3x	0.3x	0.8x	5.4x	0.0%
AutoTrader (AUTO LN)	\$5.93	\$5,861	6.5%	12.6%	21.2x	18.8x	17.1x	15.9x	12.3x	11.5x	NM	1.3x	1.3%
CarGurus (CARG)	\$39.37	\$4,186	22.2%	42.3%	106.7x	75.0x	77.3x	53.3x	7.4x	6.1x	14.0x	0.0x	0.0%
Cars.com (CARS)	\$25.86	\$2,458	6.2%	13.2%	12.8x	11.3x	10.4x	9.9x	3.5x	3.3x	1.1x	3.0x	0.0%
TrueCar (TRUE)	\$9.88	\$833	12.1%	64.1%	48.0x	29.2x	18.0x	13.3x	2.0x	1.8x	2.7x	0.5x	0.0%
			22.2%	64.1%	106.7x	75.0x	77.3x	53.3x	12.3x	11.5x	14.0x	3.0x	1.3%
			11.7%	33.0%	47.2x	33.6x	30.7x	23.1x	6.3x	5.7x	6.0x	1.2x	0.3%
			6.2%	12.6%	12.8x	11.3x	10.4x	9.9x	2.0x	1.8x	1.1x	0.0x	0.0%
Carvana (CVNA)	\$31.98	\$5,279	48.4%	NM	NM	NM	NM	NM	2.7x	1.5x	15.2x	NM	0.0%
		Premium To Auto Dealer Peer Average:							419%	191%	746%		

Source: Company financials, and Bloomberg Consensus estimates

Spruce Point Sees 50%-70% Downside In CVNA At The Very Minimum

Without attempting to project Carvana's financials out 3-5 years or longer, it's impossible to value the business on earnings or EBITDA – and that's assuming you're comfortable with the assumption that the business will ever achieve positive profitability. Carvana is winning over analysts and investors because it's a TAM stock: spin a good enough story about how big you might grow and how good the economics might be if everything works out, and investors won't want to miss out on the opportunity. We are much more skeptical on both Carvana's growth and the economics of the underlying business. However, for the sake of taking stock of where the market stands, we go through the exercise of valuing CVNA on an EV/Sales basis below.

Applying a generous 0.5x to 0.75x EV/2019E sales, we estimate that CVNA shares have 50%-70% downside from current levels.

<i>\$ in mm, except per share figures</i>	Low Estimate	Midpoint	High Estimate	Note
EV/Sales Multiple	0.5x	0.75x	1.0x	CarMax at 1.3x and Truecar at 1.8x have proven business models with significantly better mgmt, governance, transparency, and lower business risk. CVNA should trade at a discount to them, closer to traditional brick-and-mortar auto dealers
2019E Consensus Sales % implied growth	\$3,607 83%	\$3,607 83%	\$3,607 83%	Gives CVNA the benefit of doubt that it can hit blistering sales expectations
Enterprise Value	\$1,804	\$2,705	\$3,607	
Less: LT Debt (Incl. Leases)	(\$804)	(\$804)	(\$804)	
Less: Unrecorded Tax Receivable Agreement	(\$69)	(\$69)	(\$69)	CVNA keeps this unrecorded liability off its balance sheet
Plus: Cash and Equivalents	\$440	\$440	\$440	
= Equity Value	\$1,370	\$2,272	\$3,174	
Diluted Shares Outstanding	145.3	145.3	145.3	
Per Share Value	\$9.43	\$15.63	\$21.84	
Downside	-71%	-51%	-32%	

More Realistic: Carvana Is A Ticking Time Bomb Waiting To Go To Zero

The bulls want you to think that this stock is valuable because the top-line growth is there and the story is good. They're still waiting on profit and cash flow, but they're excited enough about the growth potential and qualitative aspects of the business model to trust that earnings will come. Call it the Ray Kinsella theory of investing: "If you build it, they will come."

The reality: not only do you have to believe in the underlying economics of the business, but you have to believe that (A) the sales today are real and self-sustaining, and (B) that the financing will continue to be there until Carvana is a sustainable business. What happens if the seemingly-irrational buyers of Carvana's subprime auto loans withdraw financing, or lack the capacity to fund a larger Carvana? Could gross profit recover? Would anyone else step up to provide funding? What happens if the credit cycle turns, and junk-rated Carvana is no longer able to fund the cash burn? What happens if regulators come down on Carvana for moving hard and fast to grow sales and generate earnings (neglecting inspection and reconditioning obligations, illegally selling VSCs for more 100% gross margin sales, generating outsized VSC profits via related-party dealings, etc.)?

Topic	What The Bulls Think	Reality
Sales Growth	People like to buy things from the convenience of their home. They don't want to have to deal with used car salesmen.	Carvana is a subprime loan originator earning vastly off-market returns on the sale of its receivables. Why should we believe that this will be sustainable as the Company grows?
Profitability Of Core Business	They can magically make more money off subprime lending than everyone else – just trust them!	Subprime auto lending is a competitive, well-trodden business. Why would they be so much better at making money from reselling subprime loans? (Maybe a party associated with an insider is helping out?)
Scalability	Tech businesses are asset-light and scale well. This business will be profitable soon – and it will be substantially more profitable than everyone else.	Carvana says it can cut more than 50% of non-D&A, non-advertising SG&A out of the traditional auto dealer model – but it still needs inventory, "advocates," physical locations, IRCs, *AND* a heavier logistics network and tech R&D.
Cash Burn And Financing Needs	Hot, high-tech growth businesses burn cash for a while – everyone knows this! Just wait and the earnings will come. It's basically Amazon!	This is a CCC+ rated subprime used auto dealer burning cash with no immediate path to profitability, relying financial backers with ties to the Company. If the credit cycle turns or these parties exit, there is no more business.
Business Practices And Customer Relations	The vending machines are so cool! The advocates are really nice!	Carvana is not inspecting and reconditioning vehicles properly. It may be running afoul of consumer protection laws.
VSC Sales	High-margin add-on.	Potentially selling VSCs illegally and getting attractive terms from related-party warranty servicer.
Management And Actors	They're super-smart Harvard and Stanford guys! What's a Board of Directors?	No public company experience. Extremely limited management experience or auto of any kind. CEO possibly surrogate of felonious bank fraudster. Non-independent directors with political connections. So many tied-in parties...

How This Goes To Zero

Spruce Point believes that, with such heavy capital needs, and with so many things that can go wrong, Carvana can be deemed a zero without much imagination.

Topic	How This Goes To Zero
Dependence On Unknown Parties For Profitable Sale Of Subprime Auto Loans	<ul style="list-style-type: none"> • Carvana appears to be selling subprime auto loans at vastly off-market rates to unknown buyers. A vital source of profit for the Company may disappear without counterparties' continued ability and willingness to buy loans at unheard-of premiums. • Should these parties, without a known rationale for supporting Carvana, choose to withdraw their support – or lack the capacity to support a larger Carvana – the Company may lack necessary funding to persist as a viable business
Dependence On Credit	<ul style="list-style-type: none"> • If the credit cycle turns, auto loan delinquencies rise, and financing becomes harder to obtain, Carvana could experience serious funding issues as a CCC+ rated subprime auto dealer • There is already evidence that Ally is cutting back. Tim Russi, a key supporter of DriveTime/Carvana at Ally, recently left the company.
Business Practices Come Under Greater Scrutiny	<ul style="list-style-type: none"> • Consumer protection investigations into Carvana's inspection and repair practices, or warranty transparency (e.g. CFPB already fined DriveTime \$8m in 2014) • Investigation into unlicensed sale of GAP waiver coverage • Violation of consumer protection or other laws triggers loan reassignment / put-back risk to CVNA • Associated parties no longer large enough to support growing VSC commissions
Management / Board / Employee Turnover	<ul style="list-style-type: none"> • Departures of Board members deemed "independent" or managers in key roles (e.g. Moorehead – Director of Finance, Accounting and Tax just quietly left in Oct 2018) • Employee turnover increases as rank/file demand higher wages and no longer accept stock grants from management
Equity Investors Lose Faith	<ul style="list-style-type: none"> • Investors grow tired of continuing to prop up the stock on the expectation that the Company will scale and generate positive profits one day. They balk at backstopping additional cash burn. • Rotation investor base from momentum / tech investors to more traditional auto investors triggers selling