

Luxembourg, November 15<sup>th</sup>, 2018

Dear Limited Partners,

I am pleased to present you here after a follow up of my recent Carvana analyses.

## Introduction

Please note that this is a follow up to my recent article [I published on Seeking Alpha](#). CVNA revenues added up to \$543m in Q3 2018. This is a year over year growth of 137%. Furthermore, the company generated a loss of \$64.4m during Q3 2018 compared to a loss of \$39.8m in Q3 2017. Finally, the 100% gross margin revenues increased by 170% year over year. The “other sales and revenues” consists primarily of gains on the sales of loans CVNA originates, commission CVNA receives on sales of VSCs and sales of GAP waiver coverage.

	Three Months Ended September 30,	
	2018	2017
<b>Sales and operating revenues:</b>		
Used vehicle sales, net	\$ 486,269	\$ 208,113
Wholesale vehicle sales	21,440	7,459
Other sales and revenues, including \$6,696, \$2,414, \$16,351 and \$6,070, respectively, from related parties	27,212	9,807
<b>Net sales and operating revenues</b>	<b>534,921</b>	<b>225,379</b>
Cost of sales	477,615	204,963
<b>Gross profit</b>	<b>57,306</b>	<b>20,416</b>
Selling, general and administrative expenses	115,768	58,676
Interest expense, including \$0, \$0, \$0 and \$1,382, respectively, to related parties	5,649	838
Other expense, net	308	671
<b>Net loss before income taxes</b>	<b>(64,419)</b>	<b>(39,769)</b>
Income tax provision	—	—
<b>Net loss</b>	<b>(64,419)</b>	<b>(39,769)</b>

(Source: CVNA 10Q Q3 2018)

Let us compare those numbers to Q2 2018.

	Three Months	
	2018	
<b>Sales and operating revenues:</b>		
Used vehicle sales, net	\$ 437,922	
Wholesale vehicle sales	16,622	
Other sales and revenues, including \$5,544, \$1,898, \$9,655 and \$3,656, respectively, from related parties	20,742	
<b>Net sales and operating revenues</b>	<b>475,286</b>	
Cost of sales	426,251	
<b>Gross profit</b>	<b>49,035</b>	

(Source: CVNA 10Q Q3 2018)

Net sales and operating revenues increased on a quarterly basis by 12.5%, whereas gross profit rose by 16.8% due to an increase of other sales and revenues.

Mr. Ernest C. Garcia, the founder, president, CEO and Chairman of the company seems to have appreciated the quarter.

**Ernest C. Garcia - Carvana Co. - Founder, President, CEO & Chairman**

Thank you, Mike, and thanks, everyone, for joining the call. The third quarter was great for us

(Source: CVNA Conference Call on Q3 2018)

Later during the Q3 2018 conference call, Mr. Garcia affirms that CVNA is already more profitable than many traditional automotive retailers.

In the third quarter, our GPU surpassed the SG&A per unit of many traditional used automotive retailers. The implications of that are significant and it deserves a moment of contemplation. It's a powerful step but it's just one of the steps along the way. Our midterm goal of \$3,000 is clearly in sight and we're beginning to get more concrete visibility beyond \$3,000. This will be among the topics we will hit during our Analyst Day on the 29th.

(Source: CVNA Conference Call on Q3 2018)

I doubt both statements of Mister Garcia. I believe that Q3 2018 numbers reveal important information about the ability to scale the business in the future in a profitable manner.

In my previous article on CVNA I advised investors and potential investors to carefully follow these metrics:

- Total Gross Profit per Unit (GPU)
- Outbound Logistic Costs
- Average Car sales price
- Advertising expenses
- Other sales and Revenues

### Total Gross Profit per Unit

The company wants investors to focus on the Total GPU in addition to revenue growth. CVNA likes to show the chart below to convince potential investors of their ability to generate future profitability.

## Look Beneath the Surface: Q3 2018 Does Not Appear as Nice as It Looks



(Source CVNA prospectus [www.carvana.com](http://www.carvana.com))

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
(dollars in thousands, except per unit amounts)						
<b>Per unit gross profit (incl. Gift): (2)</b>						
Used vehicle gross profit	\$ 1,127	\$ 841	34.0 %	\$ 1,083	\$ 737	46.9 %
Wholesale vehicle gross profit	\$ 350	\$ 418	(16.3) %	\$ 437	\$ 251	74.1 %
Other gross profit	\$ 1,075	\$ 837	28.4 %	\$ 967	\$ 728	32.8 %
Total gross profit	\$ 2,263	\$ 1,742	29.9 %	\$ 2,118	\$ 1,503	40.9 %
<b>Per unit gross profit ex-Gift: (2)(3)</b>						
Used vehicle gross profit ex-Gift	\$ 1,166	\$ 841	38.6 %	\$ 1,097	\$ 737	48.8 %
Wholesale vehicle gross profit ex-Gift	\$ 355	\$ 418	(15.1) %	\$ 439	\$ 251	74.9 %
Other gross profit	\$ 1,075	\$ 837	28.4 %	\$ 967	\$ 728	32.8 %
Total gross profit ex-Gift	\$ 2,302	\$ 1,742	32.1 %	\$ 2,134	\$ 1,503	42.0 %

(Source: CVNA 10Q Q3 2018)

During Q3 2018 special non-recurrent costs arise under the so called 100 K Milestone Gift initiated by Mister Garcia.

On September 10, 2018, we announced a commitment by our chief executive officer, Ernie Garcia, III ("Mr. Garcia"), to contribute 165 shares of Class A common stock from his personal shareholdings for every one of our then-existing employees upon their satisfying certain employment tenure requirements. In connection with such contributions, we intend to make corresponding grants of 165 restricted stock units to each such employee under our 2017 Omnibus Incentive Plan (the "100k Milestone Gift" or "Gift"). Under U.S. GAAP, the 100k Milestone Gift is treated as compensation expense, a portion of which relates to the production of our used vehicle inventory and is therefore capitalized to inventory and subsequently recognized within costs of sales when the related inventory is sold.

(Source: CVNA 10Q Q3 2018)

The company distinguishes therefore in its Q3 2018 earnings report between at Total GPU and a Total GPU ex gift. For our analyses we use the more favorable Total GPU ex gift that amounts to **\$ 2,302** in Q3 2018.

Again, the year over year growth seems impressive, amounting to 32%.

## Look Beneath the Surface: Q3 2018 Does Not Appear as Nice as It Looks



During Q2 the Total GPU added up to \$2,173. The resulting 5.9% growth from Q2 to Q3 looks, at first sight, also impressive. However, numbers are not as brilliant as they appear to be, and the management did little to acknowledge this:

Results of Operations						
	Three Months Ended June 30,			Six Months Ended June 30,		
	2018	2017	Change	2018	2017	Change
(dollars in thousands, except per unit amounts)						
<b>Per unit gross profit:</b> <sup>(a)</sup>						
Used vehicle gross profit	\$ 1,180	\$ 765	54.2 %	\$ 1,055	\$ 673	56.8 %
Wholesale vehicle gross profit	\$ 452	\$ 169	167.5 %	\$ 501	\$ 147	240.8 %
Other gross profit	\$ 919	\$ 711	29.3 %	\$ 901	\$ 661	36.3 %
<b>Total gross profit</b>	<b>\$ 2,173</b>	<b>\$ 1,501</b>	<b>44.8 %</b>	<b>\$ 2,029</b>	<b>\$ 1,356</b>	<b>49.6 %</b>

(Source: CVNA 10Q Q3 2018)

- **Revenues include a \$4m non-recurring refinancing fee**

Other sales and revenues, which primarily includes gains on the sales of loans we originate, sales of GAP waiver coverage and sales commissions on VSCs totaled \$27.2 million and \$64.2 million during the three and nine months ended September 30, 2018, and \$9.8 million and \$22.4 million during the three and nine months ended September 30, 2017, respectively. In August, 2018, we received a fee of approximately \$4.0 million for arranging and participating in the sale of finance receivables to a receivables purchaser in connection with a purchaser refinancing its ownership of the receivables, which is included in other sales and revenues. We expect other sales and revenues to increase with retail units sold. We also expect other sales and

(Source: CVNA 10Q Q3 2018)

Just as we do not consider the special effect of gifts to employees in our model, I assume it is logical to not include these non-recurring revenues in our objective to measure the future ability to generate profit. This \$4m has an impact of \$158 per car. The total GPU we take into consideration for Q3 is therefore **\$2,144** and not \$2,302.

So, the total GPU decreased by 1.3% from \$2,173 in Q2 to \$2,144 in Q3. Over a year to year this decrease translates in a slower increase:

- Q1 year over year increase was 81%
- Q2 year over year increase was 51%
- Q3 year over year increase was 22%

## Outbound Logistic Costs

I entitled [my previous Seeking Alpha article](#) "A High Price For A Non-Scalable Business Model". One of my necessary conditions for the hypothesis of non-scalability is the at least linear increase of outbound logistic costs to revenues. Outbound logistic costs include fuel, maintenance and depreciation related to operating a transportation fleet and third-party transportation fees, except the portion related to inbound transportation, which is included in cost of sales.

Let us look how those costs evolve during Q3 2018.

## Look Beneath the Surface: Q3 2018 Does Not Appear as Nice as It Looks



	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(in thousands)			
Compensation and benefits <sup>(1)</sup>	\$ 34,411	\$ 19,404	\$ 88,649	\$ 54,496
100k Milestone Gift	6,760	—	6,760	—
Advertising expense	27,467	15,475	79,259	39,299
Market occupancy costs <sup>(2)</sup>	3,110	1,734	8,238	4,141
Logistics <sup>(3)</sup>	9,913	3,905	24,056	9,829
Other costs <sup>(4)</sup>	34,107	18,158	87,644	48,830
Total	\$ 115,768	\$ 58,676	\$ 294,606	\$ 156,595

(Source: CVNA 10Q Q3 2018)

Outbound logistic costs increased by 153 % year over year, as to say faster than the 137 % increase of Revenues.

	Jun 30, 2017	Sep 30, 2017	Dec 31, 2017	Mar 31, 2018	Jun 30, 2018
	(in thousands)				
Compensation and benefits <sup>(1)</sup>	\$ 18,789	\$ 19,404	\$ 22,219	\$ 24,987	\$ 29,251
Advertising expense	12,385	15,475	16,398	25,009	26,782
Market occupancy costs <sup>(2)</sup>	1,424	1,734	2,081	2,510	2,618
Logistics <sup>(3)</sup>	3,116	3,905	4,555	6,318	7,826
Other costs <sup>(4)</sup>	16,297	18,158	21,552	24,362	29,175
Total	\$ 52,011	\$ 58,676	\$ 66,805	\$ 83,186	\$ 95,652

(Source: CVNA 10Q Q3 2018)

On a quarter over quarter basis, outbound logistic costs increased from \$7,826m to \$9,913m, an increase of 26% compared to a revenue increase of around 12%. This is not what I call leveraging.

Three Months Ended September 30,	
2018	2017

Unit sales information:			
Used vehicle unit sales	25,324	11,719	116.1 %
Wholesale vehicle unit sales	4,408	1,797	145.3 %

(Source: CVNA 10Q Q3 2018)

The company sold 25,324 used vehicles during Q3 2018. I conclude that outbound logistic costs per car increased on a quarter-to-quarter basis from \$348 to **\$391** per car.

As I argued during my previous article, these outbound logistic costs should be included in Cost of Sales. I call this adjusted Total GPU "True GPU".

Our calculation of the True GPU was **\$1,753** during Q3 2018, a decrease of 3.9%.

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## Look Beneath the Surface: Q3 2018 Does Not Appear as Nice as It Looks



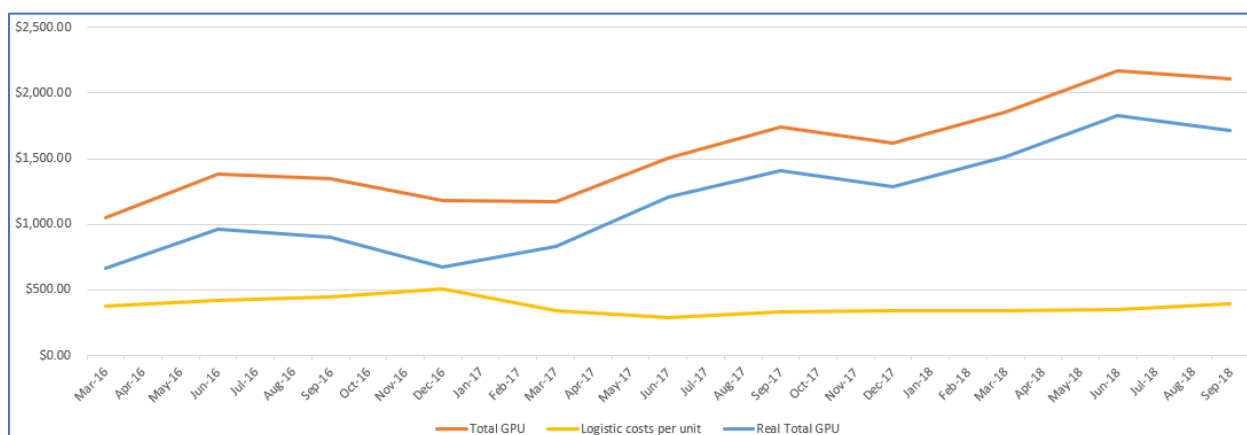
I did an analysis going back to 2016, over a year before CVNA's IPO in April 2017.

	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Sep-18
Units sold	3783.00	4355.00	5023.00	5600.00	8334.00	10682.00	11719.00	13517.00	18464.00	22570.00	25324.00
Total GPU	\$1,046.00	\$1,386.00	\$1,347.00	\$1,184.00	\$1,169.00	\$1,501.00	\$1,742.00	\$1,619.00	\$1,854.00	\$2,173.00	\$2,105.00
Logistic costs	\$1,431.00	\$1,832.00	\$2,252.00	\$2,835.00	\$2,808.00	\$3,116.00	\$3,905.00	\$4,555.00	\$6,318.00	\$7,826.00	\$9,913.00
Logistic costs per unit	\$378.27	\$420.67	\$448.34	\$506.25	\$336.93	\$291.71	\$333.22	\$336.98	\$342.18	\$346.74	\$391.45
<b>Real Total GPU</b>	<b>\$667.73</b>	<b>\$965.33</b>	<b>\$898.66</b>	<b>\$677.75</b>	<b>\$832.07</b>	<b>\$1,209.29</b>	<b>\$1,408.78</b>	<b>\$1,282.02</b>	<b>\$1,511.82</b>	<b>\$1,826.26</b>	<b>\$1,713.55</b>

(Source: Glacier Capital)

As you can see True GPU also dropped during Q3 2016. However, in Q3 2017, the company managed to generate a large increase in True GPU. There is seasonality in the business, but this relies mostly on a weakness in Q4, as you can also see in the document.

The decrease in True GPU is mainly due to an increase of 12.9% of outbound logistic costs compared to the previous quarter. You can see in the following chart that outbound logistic costs did not improve over the long term. On the contrary, the year over year increase even adds up to 16.7%.



(Source: Glacier Capital)

Outbound Logistic costs currently make up around 20% of Total GPU.

- Why did outbound logistic costs per unit increase during this quarter?

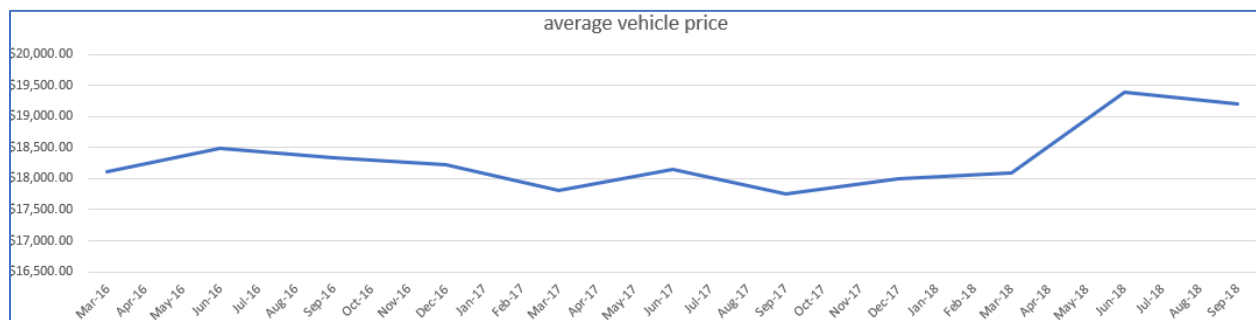
It may be that the distance of delivery increased or the price per mile. We know that management does everything to grow as fast as possible to take advantage of the good financial and economic conditions. The company opened many new markets recently. It is logical that the distance to the Inspection and Reconditioning Centers (IRC) increase, the more markets the company penetrates, the number of IRC staying constant. If management increases the IRC without penetrating new markets, logistic costs might decrease.

However, increasing the number of IRC causes an inflation in fixed costs, and softens thereby the higher flexibility of an internet-based business model compared to the traditional business model of KMX for example. This is, in principle, not a bad thing, but it would not justify the lofty valuation compared to traditional companies in this sector.

I remind you that I believe that pure gross margin (Sale price minus Purchase Price) is capped on a low level because of external market criteria. I developed this assumption more deeply in my [previous article](#). If I assume that inbound logistic costs are equal to outbound logistic costs, the company is facing about **\$780** of logistic costs per unit! I remind you that the gross margin in Q3 2018 was 10.8%! There is not much left to pay the other costs and generate a positive net margin of around 4% as KMX does.

In other words, around 36% of the Total Gross Margin of \$2,144 is used to move cars around. A possibility to increase profitability is to increase the value of the asset that must be moved around. An expensive car is not heavier or bigger than a cheaper car, but in principle gross margins are higher.

### Average selling price



(Source: Glacier Capital)

The average unit selling price was \$19,020 during Q3 2018. The pretty large increase in average sales price in Q2 2018 reversed a little bit again during this quarter.

What can the management do to improve profitability if we assume that pure gross margin cannot be improved?

CVNA must increase the portion of more highly profitable clients, as to say clients that live closer to IRC and that buy higher gross margin cars. Indeed, the statistical mode of the selling price would give us more information than the average selling price.

During the recent Conference Call Mister Jenkins gave same precision about this network intensity.

**Mark Jenkins - Carvana Co. - CFO**

So I think as we continue to launch markets, I think it will be a mix of network expansion markets and network density markets. I think we are largely expanded coast-to-coast now. So there's still a few large network expansion market left. But as we look forward, after a couple of major network expansion markets, there will be a lot of network density markets as we're marching toward continued market openings over time.

Source: Conference Call on Q3 2018)

How can they improve networking density?



## Advertising Costs

This is probably easier said than done, especially because it is the first time since December 2016 that they decreased advertising expenses. The December 2016 decrease was probably an act of window dressing before the IPO the following quarter.



(Source: Glacier Capital)

It is not evident why advertising costs did not increase for the first time since CVNA's IPO. A few possible explanations are that it was just a timing matter and the decrease will be compensated by a higher Q4 increase or the management is actively limiting costs because of a decrease of profitability during Q3. This last case is of course a negative sign because management does not believe in a profitability jump in the short term.

## Other sales and revenues

Let us in this context go back to the beginning of this article. I wrote about the 100% gross margin other sales and revenues. In my recent article [published on Seeking Alpha](#) I described how important those 100% gross margin products are. As you can see, they add up in Q3 2018 to only 4.57% of Revenues but make up 41 % of the total gross margin! Those revenues are a necessary condition for the success of the business.

The before mentioned \$4m fee the company earned during Q3 2018 are included in those 100% gross margin products. In the table hereafter, I took these \$4m out. The part of the adjusted other sales and revenues did not increase during the Q3.

	Jun-16	Sep-16	Mar-17	Jun-17	Sep-17	Mar-18	Jun-18	Sep-18
Revenues								
Used vehicles	\$ 80,488.00	\$ 92,115.00	\$ 148,382.00	\$ 193,947.00	\$ 208,113.00	\$ 334,056.00	\$ 437,922.00	\$ 486,269.00
Whole vehicles	\$ 2,475.00	\$ 2,870.00	\$ 5,726.00	\$ 7,818.00	\$ 7,459.00	\$ 10,133.00	\$ 16,622.00	\$ 21,440.00
Total Revenues	\$ 82,963.00	\$ 94,985.00	\$ 154,108.00	\$ 201,765.00	\$ 215,572.00	\$ 344,189.00	\$ 454,544.00	\$ 507,709.00
Other revenues	\$ 3,563.00	\$ 3,859.00	\$ 4,965.00	\$ 7,600.00	\$ 9,807.00	\$ 16,233.00	\$ 20,742.00	\$ 23,212.00
100% gross margin								
Pourcentage of total revenues	4.29%	4.06%	3.22%	3.77%	4.55%	4.72%	4.56%	4.57%
Gross Profit	\$ 16,039.00	\$ 6,766.00	\$ 9,746.00	\$ 16,039.00	\$ 20,416.00	\$ 34,234.00	\$ 49,035.00	\$ 57,306.00
Part of Gross Margin	22%	57%	51%	47%	48%	47%	42%	41%

(Source: Glacier Capital)



Mister Basham asked about the reasons during the conference call.

**Seth Mckain Basham** - *Wedbush Securities Inc., Research Division - SVP of Equity Research*

Got it. Helpful context. And then my follow-up is on other GPU this quarter. **Ex the \$158 per unit that you earned from the \$4 million** refinancing fee, other GPU was flat with the second quarter and also we saw more limited gains year-over-year than the second quarter as well. What's going on there? Any change in the financing penetration rate? Or other factors impacting that other GPU this quarter?

(Source: Conference Call on Q3 2018 earnings)

The CFO, Mister Jenkins, answered that one of the reasons might be the rise of interest rates.

**Mark Jenkins** - *Carvana Co. - CFO*

So yes, I think that the other GPU said was roughly flat sequentially after kind of adjusting for the finance monetization fee. I think there's some small puts and takes there. **Interest rate continues to rise, which has a little bit of an impact on finance premium.** And then we've made some gains actually in attachment of vehicle service contracts to some of the initiatives that we've undertaken. Started to see some of those gains in the third quarter and believe that will be a positive for us going forward.

(Source: Conference Call on Q3 2018 earnings)

One of the main counterparties of these other revenues and sales is Drivetime what makes it even more important that we keep a close eye on that number. KMX manages to generate 3.2 % of other sales and revenues.

## Scalable costs

Scalable costs include:

- Compensation and benefits
- Market occupancy costs
- Other overhead costs

I call those costs scalable because they should increase slower than revenues in the future. Furthermore, those costs should be much lower for CVNA than for old-fashioned companies like KMX. In other words, CVNA gains here what it loses on logistic costs.

In my previous article, I did a simplified comparison between the two business models. You can see that I assumed that the before mentioned costs increase slower than revenues.

## Look Beneath the Surface: Q3 2018 Does Not Appear as Nice as It Looks



		KMX	CVNA	Factor	CVNA --> KMX	Difference
				9		
Compensation and benefits	\$	238,882.00	\$ 29,251.00	4.5	\$ 131,629.50	(\$107,252.50)
Store occupancy costs	\$	90,762.00	\$ 2,618.00	4.5	\$ 11,781.00	(\$78,981.00)
Advertising expense	\$	46,684.00	\$ 26,782.00	4	\$ 107,128.00	\$60,444.00
Other overhead costs	\$	77,227.00	\$ 29,175.00	2.5	\$ 72,937.50	(\$4,289.50)
Outbound logistic costs	\$	-	\$ 7,826.00	10	\$ 78,260.00	\$78,260.00
Total	\$	453,555.00	\$ 95,652.00		\$ 401,736.00	(\$51,819.00)
Inbound Logistic	\$	19,688.00	\$ 7,899.50		\$ 68,908.00	\$ 49,220.00
Total	\$	473,243.00			\$ 470,644.00	\$ (2,599.00)
						-0.05%

(Source: Glacier Capital)

As you can read in the following table, those costs increased more than revenues over the last quarter.

Compensation and benefits	\$6,647.00	\$7,875.00	\$9,868.00	\$12,800.00	\$16,303.00	\$18,789.00	\$19,404.00	\$22,200.00	\$24,987.00	\$29,251.00	\$34,411.00	18%
Market Occupancy costs	\$453.00	\$400.00	\$346.00		\$983.00	\$1,424.00	\$1,734.00		\$2,510.00	\$2,618.00	\$3,110.00	19%
Other Costs	\$6,441.00	\$7,646.00	\$8,852.00		\$14,375.00	\$16,297.00	\$18,158.00		\$24,362.00	\$29,175.00	\$34,107.00	17%

(Source: Glacier Capital)

However, I believe this will change during the next quarters because the company will focus more on existing markets. The current IRC that are not utilized to full capacity. In contrary to logistic costs I believe that those costs will increase less fast than revenues during the next quarters.

## Cash Flow

	Nine Months Ended September 30,	
	2018	2017
Net cash used in operating activities	\$ (263,875)	\$ (116,014)
Net cash used in investing activities	(113,898)	(59,408)
Net cash provided by financing activities	648,915	241,181
Net increase in cash, cash equivalents and restricted cash	271,142	65,759
Cash, cash equivalents and restricted cash at beginning of period	187,123	49,450
Cash, cash equivalents and restricted cash at end of period	\$ 458,265	\$ 115,209

(Source: CVNA 10Q Q3 2018)

To manage current operations, the company used \$84.39m cash during Q3 2018, compared to \$48m in Q2 2018 or \$54m in Q3 2017. The majority part was burned by losses. The other part was among others used to increase inventory by \$36m, to \$339m. Capital expenditures decreased to \$33m, compared to \$52m in Q2 2018. Cash from financing activities amounted to \$368m during Q3 2018.

Let us start our analyses with a reminder of the debt situation of the company from its current Q10 filing.

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We have a substantial amount of indebtedness, which requires significant interest and principal payments. As of September 30, 2018, we had, on a consolidated basis, \$804.2 million aggregate principal amount of outstanding indebtedness, including \$350.0 million related to the Senior Notes, \$349.4 million of borrowing under our Floor Plan Facility between us and Ally Financial and \$38.1 million aggregate principal amount outstanding indebtedness represented by our promissory note agreements and capital leases between us and third-party providers of equipment financing. Also, as of September 30, 2018, we had, on a consolidated basis, \$66.7 million of other long-term indebtedness related to our sale leaseback transactions. Our substantial indebtedness could have significant

(Source: CVNA 10Q Q3 2018)

As I mentioned in [my previous article](#), the company risked running out of Cash by end this year. The probability was of course very low, because market and economic conditions are still good, and some big players (Drivetime, ALLY) have skin in the game.

- **Senior notes**

### *Other Long-Term Debt*

From time to time, we enter into promissory note agreements to finance certain equipment for our transportation fleet and building improvements. The assets financed with the proceeds from these notes serve as the collateral for each note and certain security agreements related to these assets have cross collateralization and cross default provisions with respect to one another. Each note has a fixed annual interest rate, a two - to five -year term and requires monthly payments. As of December 31, 2017 , the outstanding principal of these notes had a weighted-average interest rate of 5.7% and totaled approximately \$26.6 million , of which approximately \$5.1 million is due within the next twelve months.

(Source: CVNA 10K 2017)

As you can read from the following extract of the 2017 10K, the interest rate increased from a weighted average of 5.7% to an interest rate of 8.875 % per annum on the new \$350m note.

### *Senior Unsecured Notes*

On September 21, 2018, we issued an aggregate of \$350.0 million in senior unsecured notes due 2023 (the "Senior Notes") under an indenture entered into by and among us, each of the guarantors party thereto and U.S. Bank National Association, as trustee (the "Indenture"). The Senior Notes accrue interest at a rate of 8.875% per annum, which is payable semi-annually in arrears on April 1 and October 1 of each year beginning April 1, 2019. The Senior Notes mature on October

(Source: CVNA 10Q Q3 2018)

To put things into context, a 3% higher interest on a \$350m debt increases the annual interest burden by \$10m, or \$2.5m per quarter.

That makes roughly 0.47% of revenues, or close to 5% of gross margin.

- **Floor plan facility**

Hereafter you have an overview of the increase in time of the floor plan facility provided by ALLY.

C . Section III.A.3 of the IFSA is amended and restated in its entirety as follows:

3. Amount of the Credit Line. The aggregate amount of the credit available pursuant to this Agreement (the "Credit Line") shall be as follows:

- (a) From August 4, 2017 through December 31, 2017 — \$275,000,000.00;
- (b) From January 1, 2018 through November 1, 2018 — \$350,000,000.00; and
- (c) From November 2, 2018 through October 31, 2020 — \$650,000,000.00.

(Source: CVNA 10Q Q3 2018)

## Look Beneath the Surface: Q3 2018 Does Not Appear as Nice as It Looks



I have two primary remarks. First, floor plan facilities cannot be used to cover losses, they only serve to finance inventory. Second, there are very strict commitments among others to hold a cash reserve.

As you can observe hereafter, the floor plan facility increase was urgent. On September 30<sup>th</sup> the amount outstanding was just by \$0.6m.

As of September 30, 2018, the interest rate on the Floor Plan Facility was approximately 5.9%. We had an outstanding balance under this facility of approximately \$349.4 million, borrowing capacity available of approximately \$0.6 million and held approximately \$17.5 million in restricted cash related to this facility.

(Source: CVNA 10Q Q3 2018)

### Floor Plan Facility Amendment

On November 2, 2018, the Company amended the Floor Plan Facility to increase the line of credit to \$650.0 million, extend the maturity date to October 31, 2020, and lower the interest rate to one month LIBOR plus 3.40%.

(Source: CVNA 10Q Q3 2018)

On November 2 (so after Q3 2018), ALLY upsized the floor plan line to \$650m, from \$350m and expanded it for two years.

In other words, CVNA has an additional \$300m to increase its inventory, which should help to better match offer to demand. Nevertheless, increasing inventory causes inbound logistic costs to increase, costs that are not covered by this floor plan facility.

The interest rate of the floor plan facility stays the same, as to say LIBOR 1 Month plus 3.4%.

This increase was not important for the short-term survival of the company given that this line only serves to increase inventory. However, it might be a sign that negotiations were tough between ALLY and CVNA, especially if we consider the following fact.

- **Receivables sale**

Another source of financing is the sale of its receivables to financial companies like ALLY that bundle them and refinance them.

We provide financing to customers and typically sell the receivables related to the financing contract to third-party investors or, in limited instances historically, DriveTime. For example, we entered into agreements in November 2018 pursuant to which third-party purchasers renewed their commitments, agreeing to purchase up to an additional aggregate \$2.6 billion of automotive finance receivables we originate. We may exceed our capacity to sell automotive finance receivables under these agreements prior to the end of the fourth quarter of 2019. As we use the available capacity under each agreement, we plan to enter into new arrangements to sell additional vehicle finance receivables. If we reach our capacity under these or future arrangements, and we cannot replace them with new arrangements, we may be unable to generate adequate liquidity and our business, financial condition and results of operations may be adversely affected.

(Source: CVNA 10Q Q3 2018)

This contract between the two companies was extended, but as you notice, to worsening conditions for CVNA.

## Look Beneath the Surface: Q3 2018 Does Not Appear as Nice as It Looks



“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.

(Source: CVNA 10Q Q3 2018)

(b) Minimum Sales Amount. The Aggregate Outstanding Principal Balance as of the related Cutoff Date shall not be less than ~~\$1%~~ 40% (adjusted downward for a nonmaterial amount resulting from application of the Freestyle Selection at a Purchase Percentage of ~~51%~~ 40%) of the aggregate principal balance of all receivables meeting the criteria described in the definition of “Eligible Receivable” originated by the Seller during the second calendar week preceding the related Closing Date unless otherwise agreed by the Purchasers.

(Source: CVNA 10Q Q3 2018)

The total amount of Commitments and the minimum Sales amount decreased compared to the precedent agreement.

An analyst wanted to get more information on this during the conference call.

**Nathaniel Holmes Schindler** - BofA Merrill Lynch, Research Division - Director

Can you help me out on what's the average FICO score of your buyers that are using financing on your site? And how is that trended since you 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?

(Source: Conference Call on Q3 2018)

**Ernest C. Garcia** - Carvana Co. - Founder, President, CEO & Chairman

Yes, so first of all, the FICO question, I was there, 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 salesman in general, we've got the very similar FICO distribution to any of those retailers and that's been very stable across time. Nothing to call out there. Ally is buying many of our loans and then they are also providing financing to other buyers that we've been able to refinance in refinancing transactions. It's that, I would say, is in concept, somewhat similar to the way securitization markets 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 will 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.

(Source: Conference Call on Q3 2018)

You can see again Mister Garcia's answer was not convincing. However, what should he have said if we assume that CVNA wanted a higher rate of purchase by ALLY?

Those assumptions are of course soft facts. Nevertheless, we are in the business of forecasting, and I do not know many anticipations without assumptions.

The result of all these new financing conditions is an increase of the interest burden.

### Interest Expense

Interest expense increased by \$4.8 million and \$8.0 million to \$5.6 million and \$13.4 million during the three and nine months ended September 30, 2018, respectively, compared to \$0.8 million and \$5.4 million during the three and nine months ended September 30, 2017, respectively. In order to expand the inventory

(Source: Conference Call on Q3 2018)

During Q3, interest increased from \$0.8m in Q3 2017 to **\$5.6m** in Q3 2018. This is about 1% of total Revenues and close to 10% of total gross margin.

We have to remember that we are in a low gross margin environment and that the company will need much more cash in the short and mid term future.

### Market Reaction

Why did the market conclude differently? Indeed, the stock price increased by 20% after market. I read several articles and analyses and most of them were just focusing on the year over year revenues growth. Headlines were “Beats on revenues” or “Increases Q4 revenue guidance”. Given that the market currently seems to focus only on growth, the stock price might not break during the next month.

I increased my short position to 2% and sold March Puts on part of my position to take advantage of the high implied volatility. I will start questioning my position from a price point of view once the market capitalization of CVNA reaches the one of KMX.

### Conclusion

What we know is:

- While officially CVNA reported improved profitability, we disagree: True GPU decreased during Q3, compared to Q2
- the company was not able to leverage outbound logistic costs
- the increase in 100% gross margin “other sales and revenues” avoided an even worse result
- financial condition worsened

This all makes the short seem more obvious. However, saying that a short is easy is an oxymoron.

What I conclude about Q3 numbers is that none of my conditions for my hypothesis described in [my previous article](#) was weakened. I do not conclude that my hypothesis got forced, because I am not sure about the cause of this worsening profitability during this quarter. It can just be an unknown factor for me that might be defined as bad luck, and as we know, bad luck tends to revert to the mean.

What I do not like about the short is:

- that the Garcia family owns Drivetime and has around 97% of the voting rights in CVNA
- drivetime is a very important contractual counterparty
  - CVNA is using their IRC facilities among others
  - It is a main contributor of the 100% gross margin products
- that Mister Garcia seems difficult to trust  
(<https://www.forbes.com/sites/nathanvardi/2017/12/18/how-an-ex-con-became-a-billionaire-from-used-cars/#263940d56d3f>)

What I like about the short is

- it is a business that is understandable

## Look Beneath the Surface: Q3 2018 Does Not Appear as Nice as It Looks



- the company needs constantly cash
- there is no lock in effect of clients
- competition can react fast and on a cheap way
- two of my main macro scenarios would be disastrous for the company, as to say recession and/or increasing interest

I hope you liked reading it as much as I liked writing it.

Marc Daubenfeld

A handwritten signature in blue ink, appearing to be "MD", enclosed in a light blue rectangular box.