

Rivian Automotive | North America

A “Sell” Rating, Story Changed with Great Guidance Risk, Initiate UW

Stock rating	Target Price
Under-weight	US\$ 16.64

Key Positive

Strong strategic partners & Vertically integrated model

Amazon was Rivian’s first strategic investor, injecting US\$ 700 mn capital to Rivian in February 2019, followed by Ford’s investment of US\$ 500 mn. Amazon 100,000 EDV orders in Rivian is the largest commercial EV order. The strong strategic partners have successfully increased public awareness and confidence. Besides, Rivian noted that “we design, develop, and manufacture category-defining EV and accessories”, which indicated that Rivian has in-house ability to manufacture electric vehicles including in-house battery packs, drive units, and RAN (Rivian Adventure Network) DCFCs (Direct current fast chargers). Though the vertically integrated model stabilizes the production process, it is possible that Rivian does not have the protections of sharing the risk with its suppliers or partners.

From top-down perspective, Trucks and SUVs comprise over 70% of new vehicle sales in the United States and account for most of the profits generated by incumbent automobile manufacturers, the target market might be attractive. Nevertheless, the size of the specific niches SAM of EV-Pick Up truck with boasting off-road capabilities that Rivian is focusing on can not be confirmed, and we are doubtful toward the market size estimation of nearly US\$ 1 Trillion for R1 Platform and US\$ 209 bn for RCV platforms stated in the RIVN’s S-1 Filing, as no one can secure this market can grow into such scale, and this story was believed in the end of last year, when the market were optimistic toward EV investments.

Key Negatives

Strong headwinds, with semi-lackluster deliveries performance

Rivian entered the secondary market at a good timing last year when market were crazy for EV stocks and willing to pay at a high valuation for the convictions of “projected market share”, needless to say, Rivian was the “EV SPAC king” in 2021, yet the stock has underperformed since listing. The sell-off is accelerating since the lower-than expected production deliveries in 2021 and further cut-down annual target in 2022 for 50%, announced in February and restated recently, that this was due to growing supply-chain constraint, largely dampened investor’s interest in its story. **We think this would be even worse for the following thesis.**

Supply Chain Constraints still exist & it’s still early to turn optimistic

As above mentioned, Rivian set a 50% lower guidance for 22E deliveries (i.e. decreased from 50K to 25K) in February this year with re-state of the same target on May 12th Earning Call ([CNBC](#), May 12th, 2022). We see China’s auto association estimates that sales in April dropped 48% year-on-year ([Reuters](#), May 6th, 2022), as zero COVID-19 policies shut factories, with some major EV-Startup players like NIO delivered 49% decreased MoM and other player’s like TSLA/XPENG/Li were also been hit by COVID. **The disappointing deliveries of China EV makers reflected the severity of unsolved supply chain issue, and this might point to more trouble for a U.S. based EV maker such as Rivian.**

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Rivian (RIVN US)

Stock Rating	Under-weight
Target Price	US\$ 16.6
Shr price (12/05/22)	US\$ 20.6
Up/downside (%)	-19.2%
52-Week Range	US\$ 19.25 – 179.47
Shares Out. (mn)	883.4 mn
Mkt Cap (US\$ bn)	US\$ 18.554 bn
EV (US\$ bn)	US\$ 3.694 bn

Fiscal year (12/31)

(US\$ in mn)	2021A	2022E	2023E
Revenue	55	1502	6105
YoY (%)	n.a.	2620%	307%
Gross Profit	-465	-1697	-305
GPM	-845%	-113%	-5%
EBIT	-4220	-6022	-5434
OPM (%)	-7673%	-401%	-89%
Net Income	-3767	-6007	-5373
NPM	-6823%	-400%	-88%
Basic EPS	-14.80	-6.73	-6.02

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Key Negative (Cont.)

Trading Below Cash, Nearly Zero Enterprise Value is reasonable

Rivian now is trading around US\$ 20.6 per share and it is sitting on great amount of cash of nearly US\$ 17 bn, with negative net debt position around US\$ 14.9 bn, this can be translated into stock price US\$ 16.64 per share, we can even say Rivian is nearly trading at Zero Enterprise Value. Yet, we still don't think this is a signal that can turn Rivian into a "value stock", it is still a growth stock with high valuations compared to peers by sales multiples, and with great risk of missing investor's patience. Besides, "trading below cash" is a punishment of "poor use of capital", that this can happen in some companies with great visions but lack of environment to realize their target, even sitting on tons of cash, and there are around 381 companies trading below cash in US stock market now ([Motley Fool Money](#), May 10th 2022, 4:26), meaning this is not "impossible" for Rivian. Though the mgmt mentioned about the cash is used to fire the business scale in R1 and RCV platforms expansions and launch of R2 platform in 2025E planned to be made in Georgia factory, we are still bearish about the future of R1 launch, modest about RCV deliveries and R2 platforms. For the R2 platform, launching a "compact mode" is not a new thing and we can see Tesla and more EV players are targeting the mass market in 3 years. Besides, Rivian has reported a US\$ 1.45 bn Cash Burn in the 22 Q1, and at current valuation which is around US\$ 18.5 bn, we see more losses and shrinking upside of revenue, and further project the financials and valuation multiples in a bearish way.

Initiate UW, with -19.2% downside in base case

Based on our estimation about the missing of the Rivian's 2022E deliveries targets, with 22E revenue 20% lower than street estimates. We adopted 0x EV/Sales and assume Rivian would be traded at a negative net debt level, which is around US\$ 16.64 Per Share, reflecting our "Sell" Rating for Rivian (RIVN US). More assumptions about valuations will be discussed [here](#).

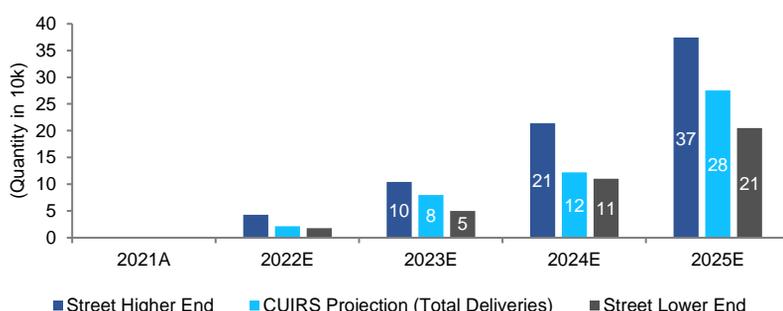
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Financials

Deliveries Outlook Summary

Exhibit 3: Deliveries Outlook Summary vs.. Consensus – Our total quantity delivered falls between the higher and the lower end of the street’s estimations, while it is closer to the lower end, reflecting our bearish estimations. It’s worth mentioning that the higher end of the estimation is almost an assumptions of “maximized capacity in 23E-25E, which we think it might be overstated.

**Deliver Outlook Comparison in 10k units
(CUIRS vs Street Estimations)**



Revenue Projections Summary

Combining above assumptions about quantity and ATP, we projected the future 5 years revenue of Rivian. We modeled its revenue to grow from US\$ 1.5 bn to US\$ 16 bn in 2025. The detail of projections have been demonstrated below:

Exhibit 4: Revenue Projections – Total Revenue of US\$ 1.5 bn fall below the consensus US\$ 1.89 bn for 20%, reflecting our investment thesis that Rivian will fail to deliver the target amount in 22E, with shrinking long-term upsides that the missing of 23E/24E deliveries due to unbinding pre-order sales and peer competitions.

(USD in millions)	2021A	2022E	2023E	2024E	2025E
Automotive Revenue					
Consumer Segment					
R1 (Premium SUV & Pickup Truck)	55.1	1,195.7	4,465.0	5,357.4	7,110.3
RT Platform (Mass-Market Full Size Pickup Truck)	-	-	-	-	1,100.0
R2 Platform (Lower Priced Mass Market SUV)	-	-	-	-	6,400.0
Commercial Segment					
RCV	0.1	279.9	1,512.0	4,070.0	836.0
Regulatory Credits (Customer & Commercial)	-	10.5	41.7	67.2	164.0
Total Automotive Revenue (\$mm)	55.2	1,486.1	6,018.7	9,494.6	15,610.4
AVG Regulatory Credit/Unit (\$)	500.0	500.0	525.0	551.3	595.4
YoY Growth (%)	n.a.	0%	5%	5%	8%
Total Deliveries (Consumer + Commercial)	920	21,080	79,500	121,850	275,498
YoY Growth (%)	n.a.	n.a.	277.1%	53.3%	126.1%
Total Blended ASP	60,011	70,500	75,707	77,920	56,662
YoY Growth (%)	n.a.	n.a.	7.4%	2.9%	-27.3%
Service Revenue					
Accumulated Deliveries	920	22,000	101,500	223,350	498,848
Portions Under Service (Moving 2 yr. AVG Accum.)	-	11,460	61,750	162,425	361,099
Monthly RPU (\$)	110	113	117	119	121
YoY Growth (%)	n.a.	3.0%	3.0%	2.0%	2.0%
Implied Service Revenue (\$mm)	0	16	86	232	526
Total Revenue Projections By Segment					
Top-Line Projections					
Automotive Part (Main Driver of Revenue)	55	1,486	6,019	9,495	15,610
Service Part (Minor Driver of Revenue)	-	16	86	232	526
Total Revenue (\$mm)	55	1,502	6,105	9,727	16,136
YoY Growth (%)	NM	NM	307%	59%	66%

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Product Comparison – Pick Up Truck

EV Segments Criteria	Pick Up Truck			
	Rivian R1T	Tesla Cybertruck	Lordstown Endurance	Ford F150 Lightning
				
Announce Date	2018	2019	2021	2021
Production Date	2021	2023	2022	2022
Price (\$USD)	\$69.0 K	Starting at \$40 k	Starting at \$52.5 k	Starting at \$40 k
Battery Capacity (kWh)	135	100-175	109	133-180
Expected Annual Productions (Units)	1,200	250,000 to 300,000	1,000	150,000
Number of pre-orders (Units)	55,400 (R1T, R1S)	600,000	100,000	200,000
Deposit paid	USD\$1,000	USD\$100	USD\$100	USD\$100
Design	Traditional and generic	Futuristic and edgy	Standard pickup style	Technological inner design
Maximum Seat	5	6	5	6
Autonomous Driving Level	L3	L3	-	L2
No of generators	2,4	1,2,3	4	2
Second needed to 100km/hr	1.0-4.9 seconds	2.9-6.5 seconds	6 seconds	4.5 seconds
Maximum Car Speed (MPH)	110	110-130	80	Undisclosed
Towing Capacity (lbs)	11,000	7,500	7,500	10,000
Range (Miles)	314	250-500	250	426-563

Pick Up Truck Comparison:

Based on our product comparison, we do see a premium price in Rivian, yet we didn't see a stronger performance and features of Rivian, comparing to its direct peers, except for the towing capacity. Besides, we believe the threats from Tesla's future launch of Cybertruck in 2023 would be the further challenge to Rivian's "projected market share" for R1T given Tesla's strong brand awareness. Besides, the earliest launched Rivian are currently facing the severe supply chain issue with inflationary risk, with demand weaken due to potential recessions, while its main competitors might be able to launch the model in a healthier demand and supply dynamics in 2H 2022 or even 2023. **Though this is a simple product comparison from consumer/demand perspectives, we didn't see a clear willingness/strong attractiveness from the fair point of customer, and there's no strong barriers from other players to acquire Rivian's market share.**

Pricing: R1T is a premium-positioned electric vehicle with the highest starting price at \$69.0K, while we believe the future price might be higher, given the past price hike decision by Rivian to \$79.5K which was canceled due to customer's complaints, followed by Lordstown Endurance with a starting price of 52.5K. Tesla Cybertruck and Ford F150 Lightning share a similar price positioning with the price starting at \$40K.

Battery Capacity: Ford F150 Lightning possesses the best battery capacity with 133-180 kWh.

Depending on the number of the motor, Tesla Cybertruck has a corresponding battery capacity ranging from 100-175 kWh. R1T battery capacity of 135 kWh has a slight edge over Lowrdstown endurance of 109 kWh.

Car Speed: Tesla Cybertruck has the fastest car speed among the other electric vehicle with a maximum car speed of 110 to 130mph. Rivian R1T comes the second with the maximum car speed of 110mph. Lordstown Endurance is comparatively slow with only 80mph of maximum car speed.

Towing Capacity: Rivian R1T performs the best, featuring 11,000 lbs towing capacity. Ford F-150 is slightly behind Rivian R1T with a towing capacity of 10,000 lbs. Tesla Cybertruck and Lordstown endurance both offer 7,500 lbs of towing capacity.

Range: Ford F150 Lightning has the longest range of 426 to 583 miles. Cybertruck has a range of 250 to 500 miles with the differences in motor choices. Rivian R1T has 314 miles of ranges, followed by Lordstown endurance of 250 miles.

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