

Tesla, Inc. Credit Review: Crowdsourcing the Research of Risk Experts

EXECUTIVE SUMMARY

CreditRiskMonitor's proprietary FRISK® score for Tesla, Inc. has persistently signaled an elevated level of financial risk. The research patterns of our subscribers, who include credit managers and other risk professionals, have also indicated a heightened level of concern for some time. However, suppliers continue to be highly accommodative to Tesla, Inc. by providing a significant amount of inexpensive trade credit to the California-based auto giant.

In this report we review the impact that the aforementioned CreditRiskMonitor subscriber crowdsourcing has had upon Tesla, Inc.'s FRISK® score, the company's financial condition at the end of 2018 and potential risk factors that should be watched going forward.

The FRISK® score is 96%* accurate in predicting public company financial stress up to and including bankruptcy over the course of the subsequent 12 months. It uses a variety of high-quality data points to generate a score, including our <u>proprietary subscriber crowdsourcing data</u> when North American-based companies such as Tesla, Inc. are being evaluated. In creating a "virtual credit group," our crowdsourcing evaluation method considers the research patterns of thousands of risk professionals – including those employed at more than 35% of the Fortune 1000 – as well as many others from large corporations around the world.

CROWDSOURCING RISK EXPERTISE

Credit and other risk professionals have been excluded from Fair Disclosure (FD) regulation, effectively allowing these individuals to discuss non-public information about the company with which they are doing business. One of the most important players in this group are credit professionals, or in Tesla, Inc.'s case, its original equipment manufacturers. In aggregate, suppliers sell their goods on credit to a corporation and thereby offer inexpensive financing to support the company's working capital.

CreditRiskMonitor crowdsources the research activities of risk professionals each and every day. The aggregate research patterns of this group, in certain cases, can indicate concern about the subject company's financial health. As one example, CreditRiskMonitor subscribers opening an individual company's overview in the credit report is normal activity, whereas careful review of key financial pages, in addition to other searches, would be indicative of concern. This unique behavior is then incorporated into the FRISK® score, which is also updated daily.

The goal of the FRISK® score is to provide an alert to subscribers that a thorough review of the public company is required. Tesla, Inc.'s FRISK® score has been trending in the high-risk "red zone" of "5" or lower as shown below, and indicates elevated financial stress.



The current FRISK® score is 3 (probability of bankruptcy* 2.10% - 4.00%), below its 19-month average and below its industry average.

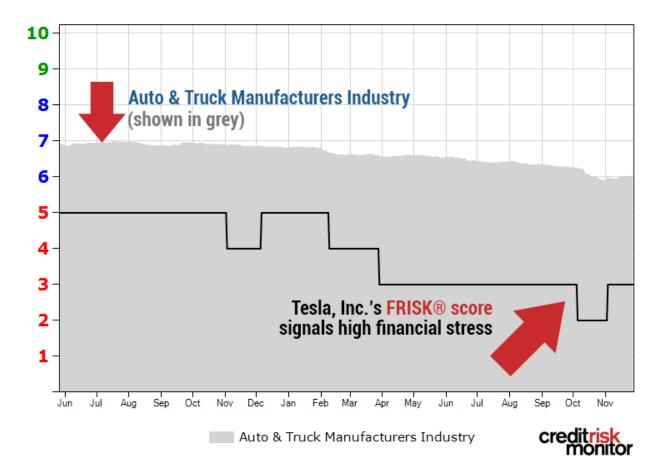


Figure 1. The progression of Tesla, Inc.'s FRISK® score from June 2017 to November 2018. Note that Tesla, Inc. has resided within the FRISK® "red zone" and has signaled heightened financial stress for 19 consecutive months.

Subscriber research patterns showed a heightened level of concern with Tesla, Inc. As illustrated above, this behavior signaled high risk in the last 12 months and reached a nadir in October 2018, which reduced the FRISK® score from a "3" to its low-water score of "2." This type of research can reflect analysis of cash flow and liquidity spreads, along with a variety of other comprehensive examinations. This concern then abated following the third quarter earnings release – likely due to the positive results revealed in its Form 10-Q filing.

LIQUIDITY ASSESSMENT

While subscribers remain watchful, they have been highly supportive of Tesla, Inc.'s liquidity position. As of the third quarter ended Sept. 30, 2018, the company reported a working capital deficit of \$1.85 billion compared to a surplus of \$600 million as of the end of last year's third quarter. This degradation in working capital was due to two factors: a substantial increase in accounts payable and the maturing of long-term debt that becomes due within the next 12 months.



For the nine months ended Sept. 30, 2018, accounts receivable grew by only \$640 million, while accounts payable expanded by \$1.2 billion. If this mismatch were to continue to widen, vendors could tighten payment terms and Tesla, Inc. might be required to look for more expensive financing alternatives (accounts payable are an interest-free form of borrowing). However, suppliers can be exceedingly lenient when there is incentive to support a large customer. In the case of Tesla, Inc., inventory financed by vendors has averaged about 100% for the last five sequential quarters: a huge benefit from a cash efficiency standpoint.

Additionally, accounts payable reported materially rose over the last four quarters, corresponding with the launch of the Model 3 automobile. CreditRiskMonitor's <u>data showed a comparable uptrend in trade payments</u>:

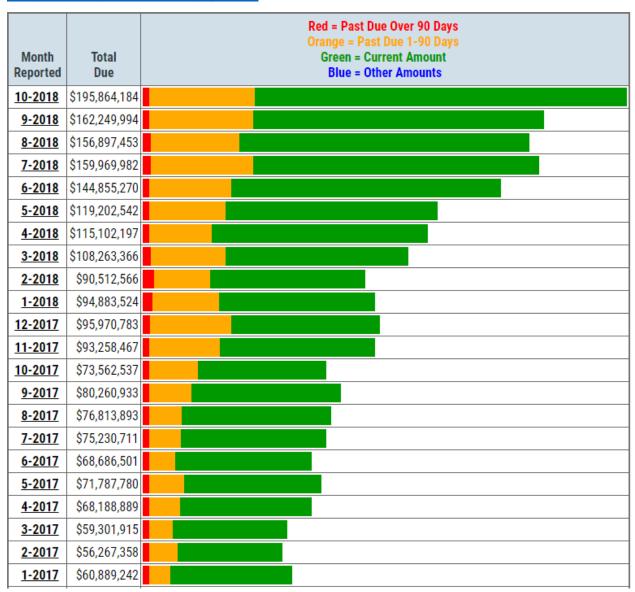


Figure 2. Trade data collected by CreditRiskMonitor from subscribers, which coincides with the uptrend in accounts payable reported by Tesla, Inc. since the start of 2017.



These trends are constructive and represent strong support from trade creditors. So while Tesla, Inc. owes approximately \$3.6 billion to suppliers – a notable sum – this liability serves as highly inexpensive financing. Separately, the company has paid a majority of its suppliers in a timely fashion (illustrated as the green portion of each bar in the graph), while a smaller portion has seen slow payment (orange).

Pertaining to near-term debt maturities, a \$230 million note that was assumed from the acquisition of SolarCity will have been taken care of following its November 2018 maturity. Yet Tesla, Inc. will have to deal with a \$920 million convertible senior note maturing by Mar. 1, 2019. The conversion will be at the option of the holder at an exercise price of \$360. Effectively, this is a binary credit event – which will be positive or negative, depending on whether the debt is converted into equity. If it is not converted, Tesla, Inc. will be on the hook for \$920 million. Tesla, Inc. will likely manage these maturities based on its existing cash, internally generated cash flow, unused amounts on credit facilities and access to capital markets.

In our view, Tesla, Inc.'s liquidity risk appears low based on total cash availability and access to funding.

CHECKING THE DOWNSIDE

Similar to CreditRiskMonitor's FRISK® score of "3", both S&P and Moody's have assigned weak credit ratings. The agencies maintain "B-" and "B3" ratings, respectively, each with negative outlooks. These are junk debt ratings and indicate highly speculative credit risk.

The weak credit ratings largely stem from Tesla, Inc.'s high financial leverage. Traditional auto manufacturers such as General Motors and Ford Motors, by comparison, have maintained low leverage levels with debt-to-EBITDA ratios of around 1x (when excluding debt associated with their finance arms). Tesla, Inc. has \$10.9 billion in total debt as of the end of 2018's third quarter (excluding its capitalized lease obligations), and using third quarter performance as a run rate, it would have a debt-to-EBITDA ratio of about 3x. While EBITDA generation has typically been weak, Tesla, Inc. rapidly increased its total car deliveries and achieved its highest reported earnings in the third quarter. In other words, if Tesla, Inc. can continue with this level of performance, its leverage ratio of 3x will be maintained, though still high relative to other automakers.

Healthy operating cash flow will also be crucial to funding future growth. According to the third quarter MD&A, Tesla, Inc. expects to cumulatively spend between \$5 and \$6 billion on capital expenditures over the course of the next two years. This budget is expected to largely cover infrastructure and future plant expansion.

Weak issuer credit ratings will generally result in high interest rates on debt financing. As of the third quarter, trailing 12-month gross interest expenses were \$710 million, which came out to a rate of approximately 6.5%. If the interest rate on Tesla, Inc.'s debt rises in the future, this will be a substantial cost headwind. Its 2025 unsecured bond has traded between yields of 7% to 8% for several months. If the company refinances or incurs additional debt closer to this higher rate, either would serve as a credit negative event to the capital structure. Tighter trade payment terms would similarly drive a material increase in financing costs as well.

Another risk consideration is potentially weaker sales at Tesla, Inc. Auto manufacturers have substantial operating leverage, where a modest downtick in selling prices and/or unit volumes can have disastrous results on earnings and cash flow. Tesla, Inc. will need to maintain reasonable price points and volumes on deliveries, particularly of its Model 3, to avoid returning



to massive losses. New electric and hybrid vehicles from competitors may serve as a near-term headwind on this front.

The economy poses a tail risk as well. The last time aggregate demand for vehicle sales declined, both General Motors and Chrysler filed for Chapter 11 while Ford Motors barely avoided bankruptcy. Total U.S. vehicles sales have pushed about 17.5 million units for four consecutive years, roughly the level of the last peak according to FRED® Economic Data. When the next economic downturn occurs, a decline in auto-sales will put pressure on every automaker, but would be particularly problematic for Tesla, Inc. given its high financial leverage.

In our view, Tesla, Inc.'s debt structure has higher risk of default and bankruptcy compared to industry peers, particularly in the event of an economic downturn.

CONCLUSION

The crowdsourced research patterns of our risk expert subscribers indicate that there have been significant concerns about Tesla, Inc.'s financial condition in 2018. On the other hand, they have been highly supportive by effectively providing all of the company's inventory on credit, significantly benefitting Tesla, Inc.'s liquidity. Trade creditors maintaining relaxed payment terms is extremely helpful, but we believe close monitoring should continue based on Tesla, Inc.'s weak capital structure. We would recommend particularly focusing on four core areas:

- The trend in the FRISK® score over the next 12 months;
- · Whether inventory financed by vendors maintains its strong trend;
- If the company incurs additional debt and increases financial leverage;
- The trajectory of the company's operating performance and the bottom line.

*As backtested on U.S. public companies; results may vary for private companies and by country. All references to the FRISK® score's accuracy on the CreditRiskMonitor website are qualified by this statement.