

Tesla Finances

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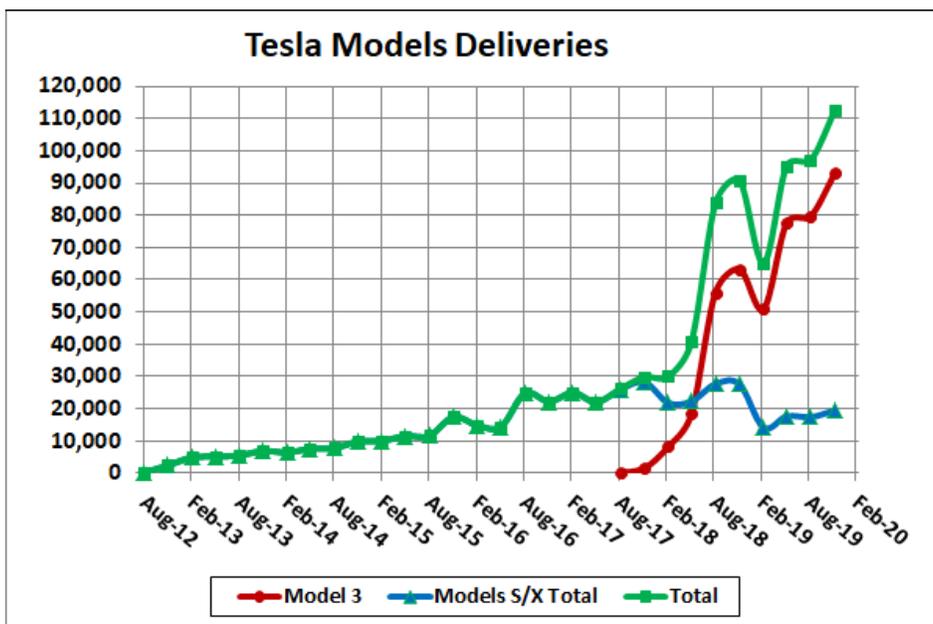
16 February 2020

You can use my referral to buy or lease a [Tesla Model S, Model X or Model 3](#).

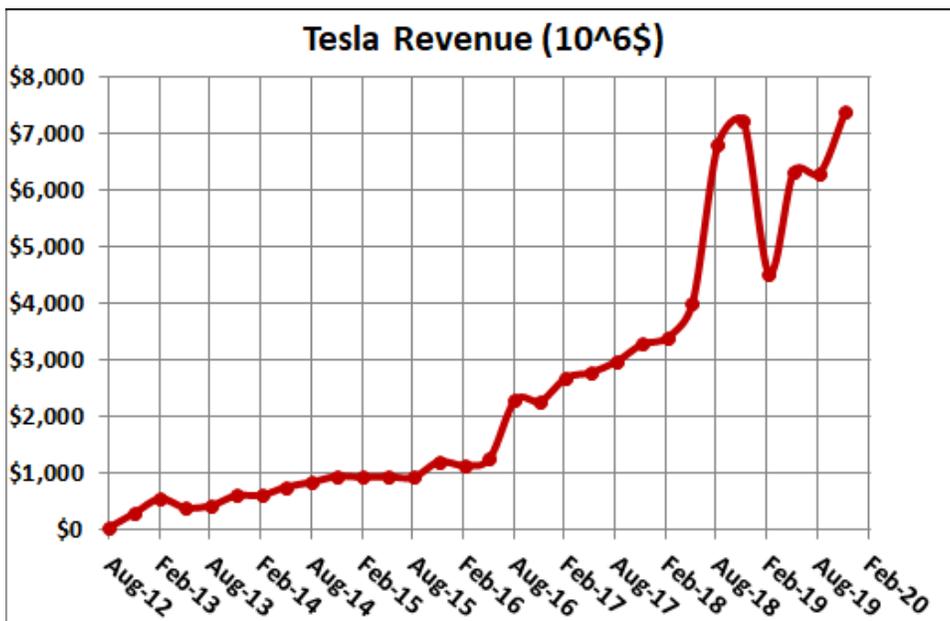
Tesla is long-term oriented, years to decades instead of yearly quarters that drive the stock market.

All \$ numbers in this document are in units of millions (10^6 \$).

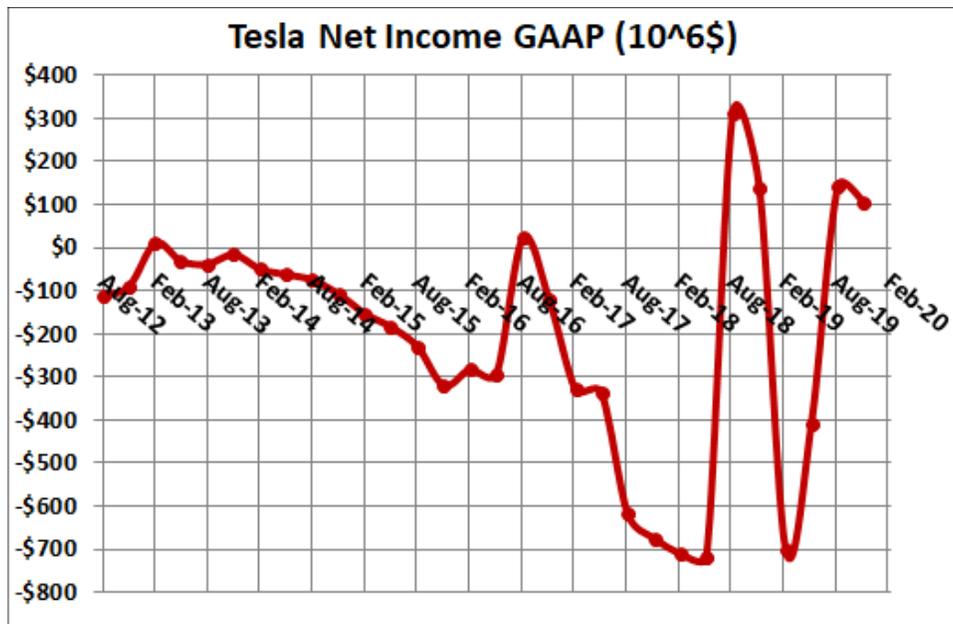
Here are production data for Tesla BEVs:



Here are Tesla revenue data:



Here are Tesla net-income data:



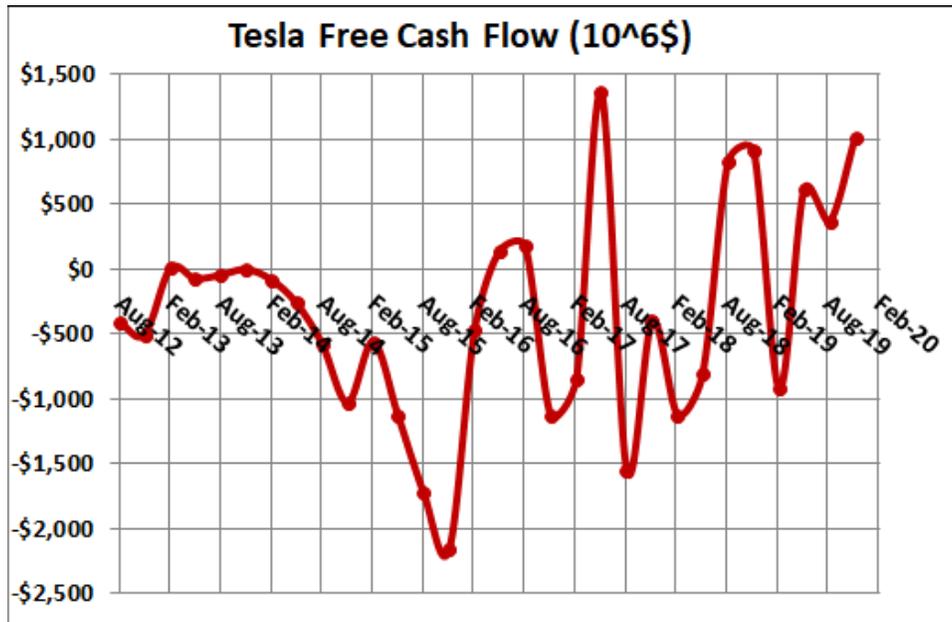
It is reasonable to expect some further ups and downs in the years ahead, but it is likely that this curve will become positive for 2020 due to the fact that the [Model 3 production](#) per week has increased by quarter-year as shown in the first graph.

Indications are that Model-3 production is close to [7,000/week now](#) and will probably go to [10,000/week](#) because of the Gigafactory 3 in China.

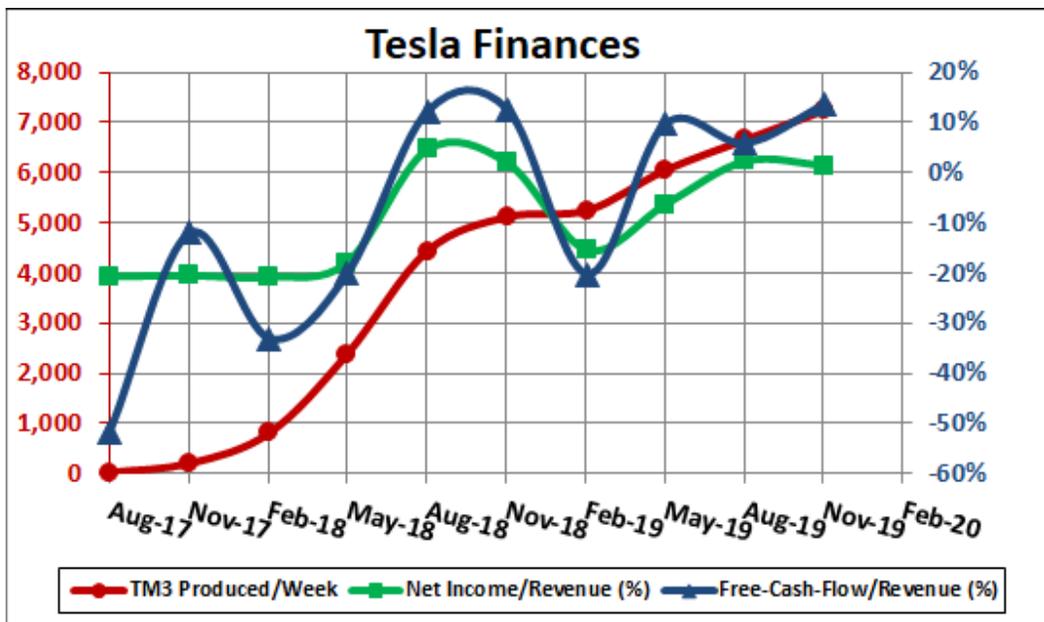
The onset of [Model-Y production and Model-3 production in China](#) may dip the net-income/revenue percentage again, but it should eventually rise faster.

Another important financial number is “free cash flow” (FCF) [roughly defined as](#) “a measure of financial performance calculated as operating cash flow minus capital expenditures.” [Another way to state it](#) is: “what is available for distribution among all the securities holders of a corporate entity”

Here are Tesla free-cash-flow data:



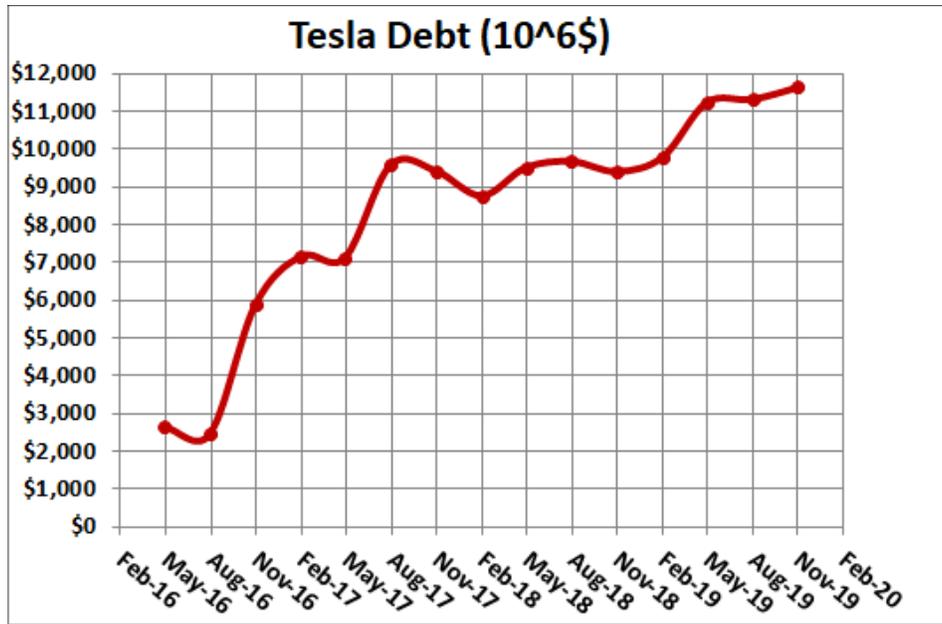
It is informative to plot the quarterly Model-3s/week with the net-income/revenue and the free-cash-flow/revenue on the same graph:



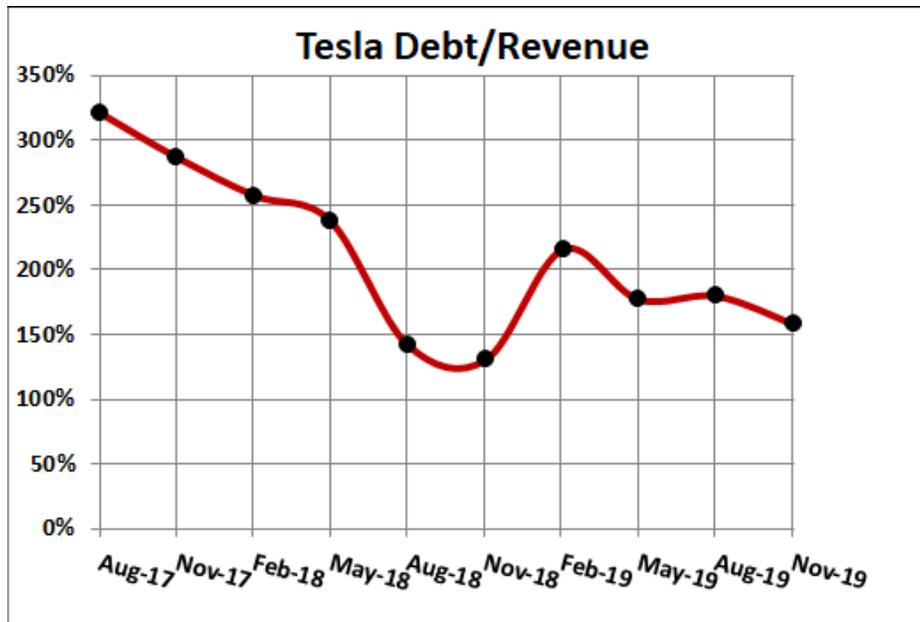
TM3 production is on the left axis and the two ratios are on the right axis.

It is seen that the low values for the ratios are when production is being rapidly ramped up to a higher number of vehicles/week. This should not surprise anyone who understands the finances of a large startup company!

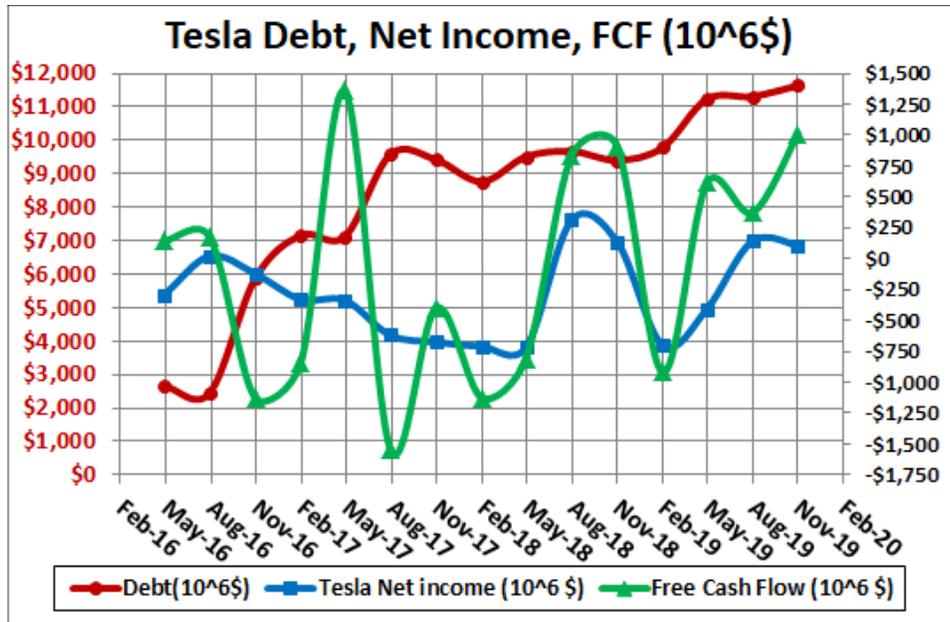
Here are Tesla debt data:



It is interesting to see the ratio of long-term debt to revenue:

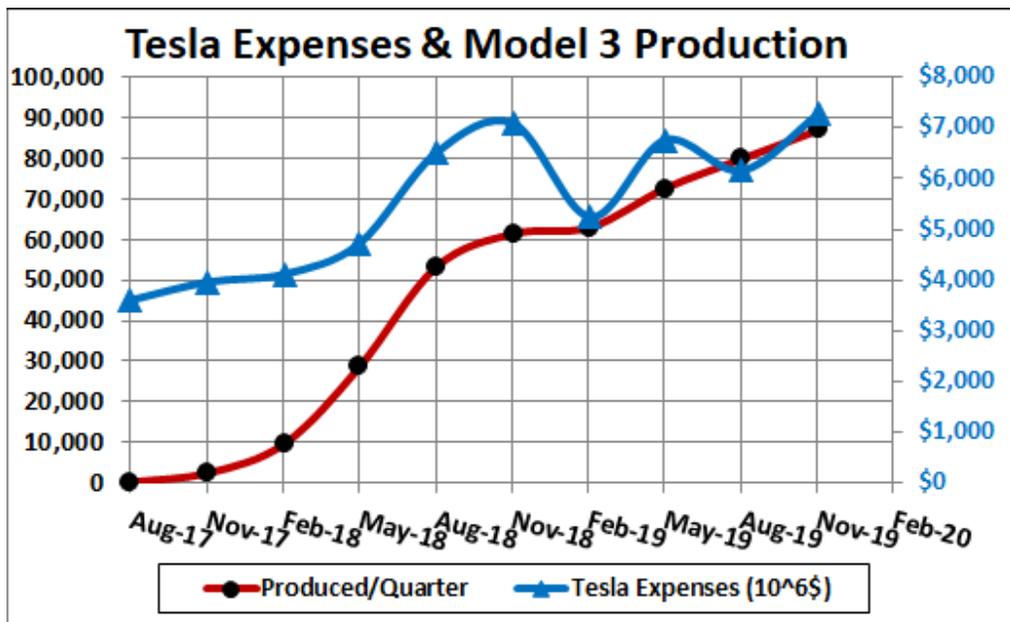


Compare debt to net income and free cash flow (FCF):



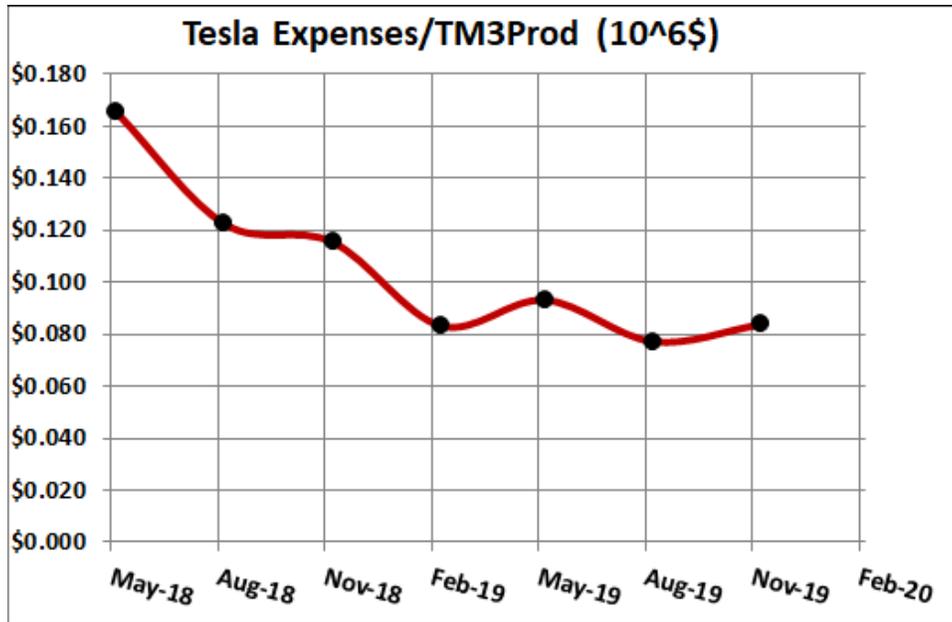
Debt is on the left axis and the two ratios are on the right axis.

Compare operating expenses (OPEX) and Model 3 production:

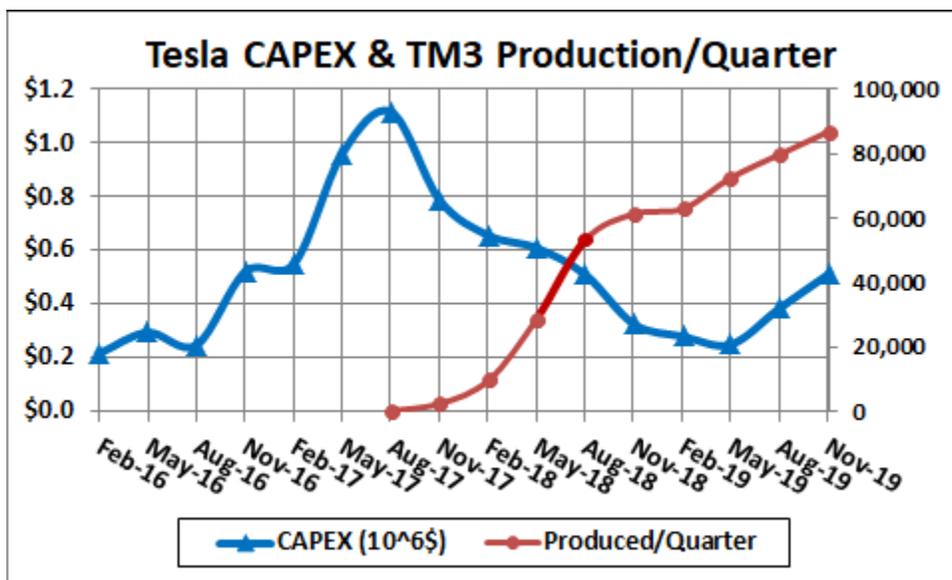


Operating expenses have been oscillating around $\$6.5 \times 10^9$ for the last two years as production of Model 3 has grown rapidly.

The following graph of operating expenses divided by TM3 production/quarter shows that TM3 production efficiency has been increasing:

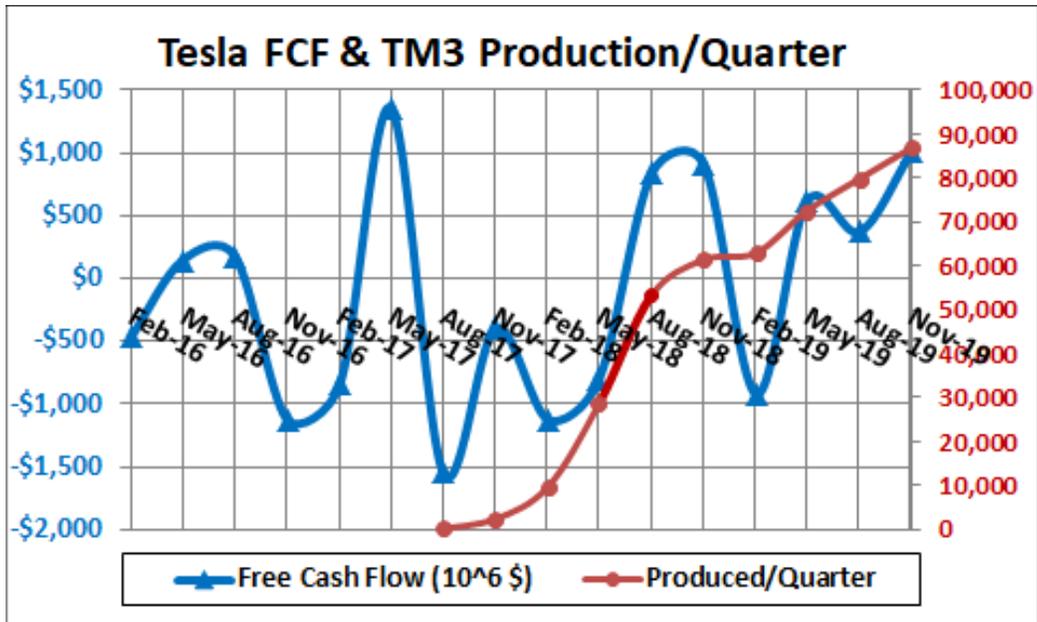


[Tesla capital expenditures](#) (CAPEX):



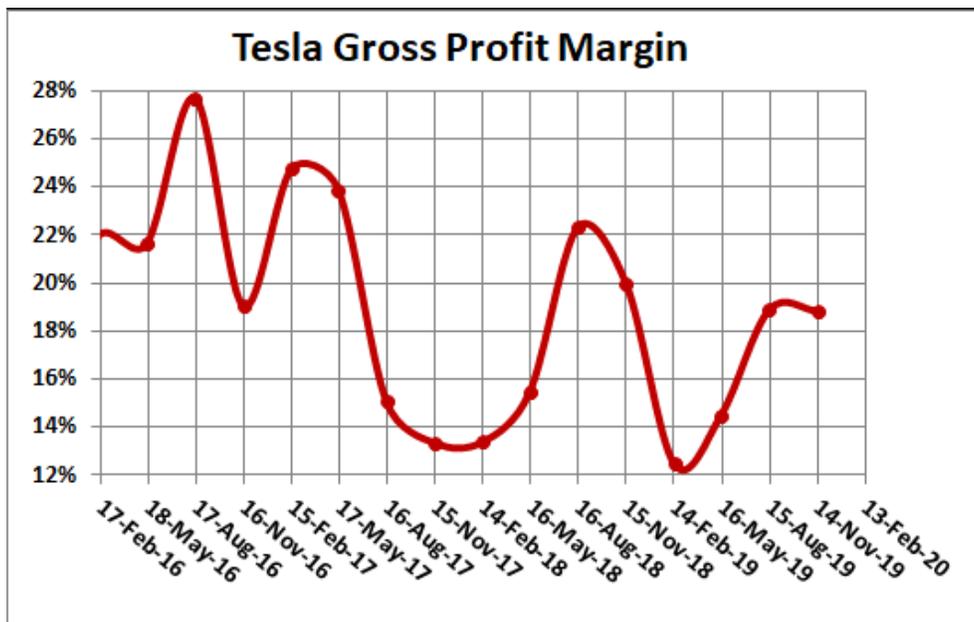
Some financial analysts have decried this reduction in CAPEX because of the necessary expenses of tooling up for Model-Y production and building Gigafactory 3 in Shanghai China. However, it appears that both of those efforts are moving along at a rapid pace. The uptick in 3Q/4Q-2019 CAPEX indicate a move into advancing expenses for those projects.

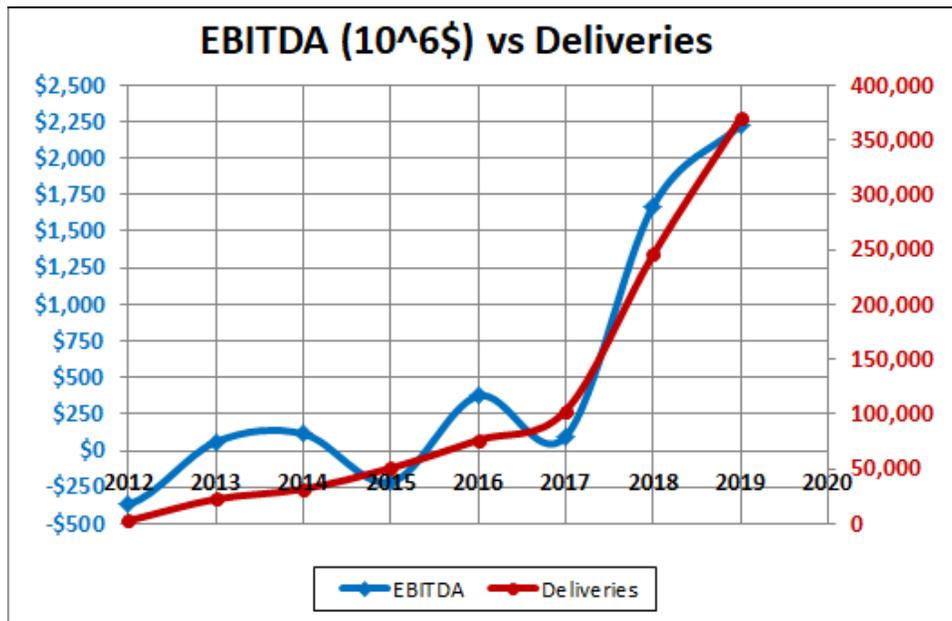
[Tesla free cash flow \(FCF\):](#)



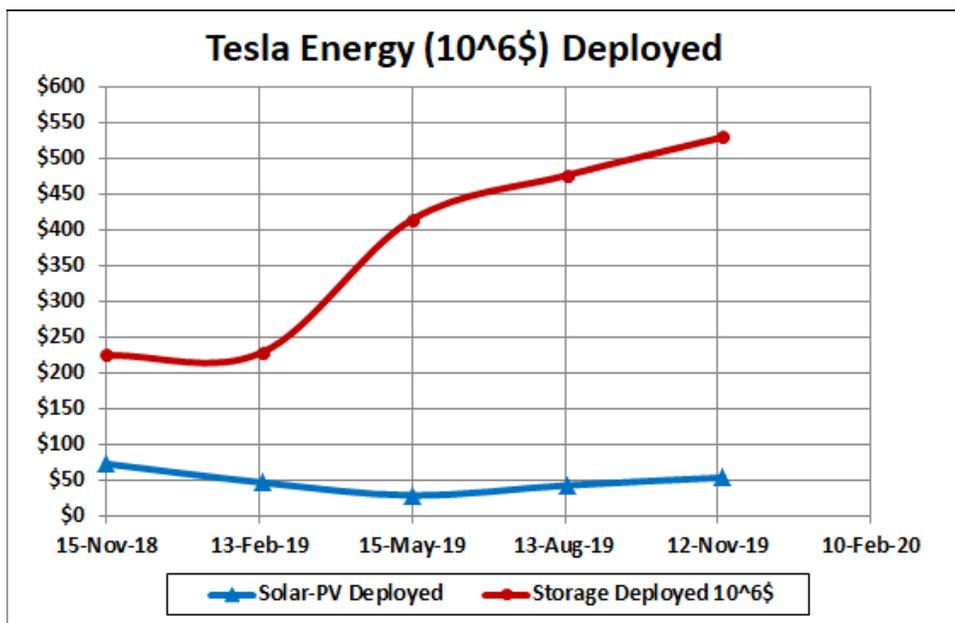
Negative FCF means that existing funds must be used to operate, some or all of which are debt.

Positive free cash flow for the last three quarters is good news for Tesla's future.





[EBITDA = earnings before interest, taxes, depreciation and amortization](#)



Solar PV and battery storage are expected to be a major part of Tesla's future.

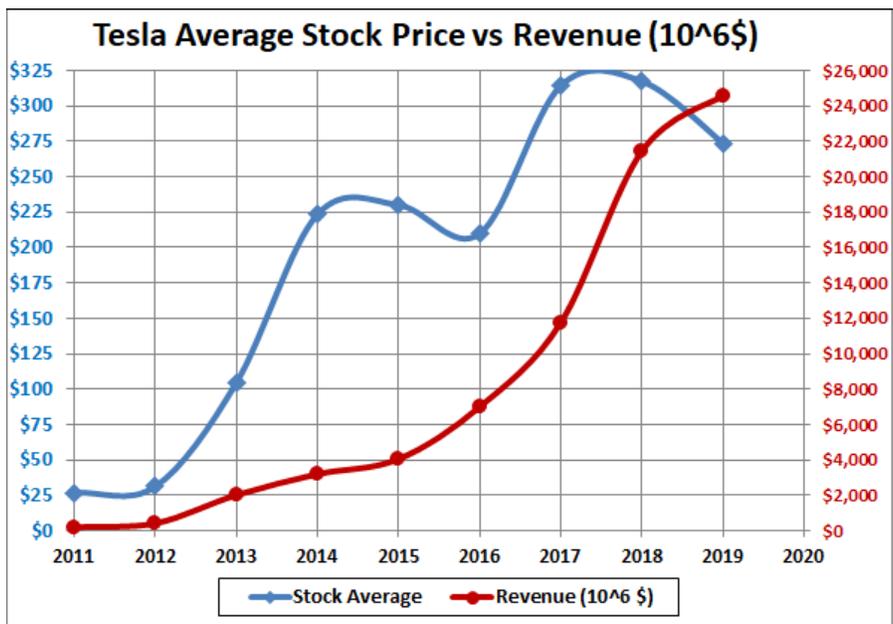
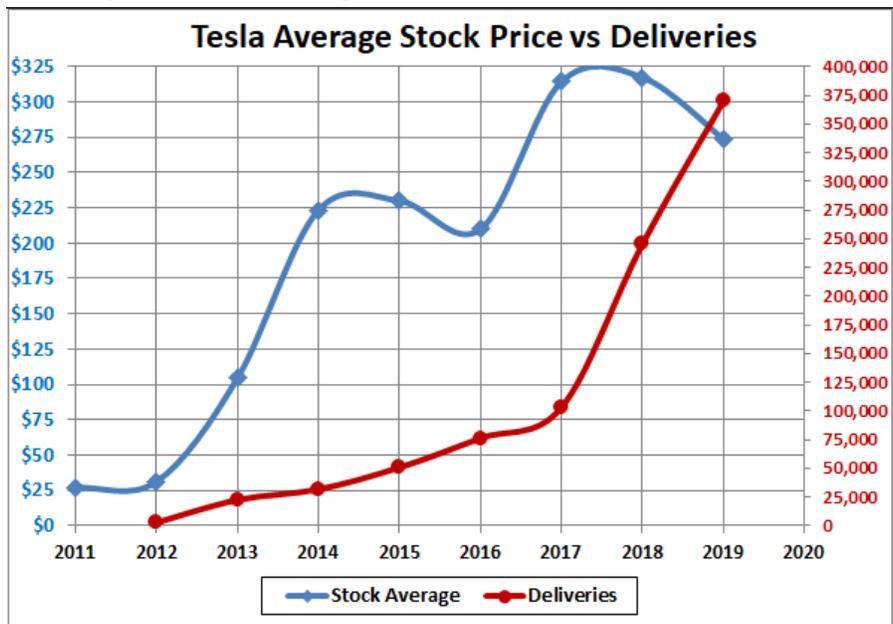
My conclusion is that Tesla's finances are what usually occur for large upstart companies that go on to greater things.

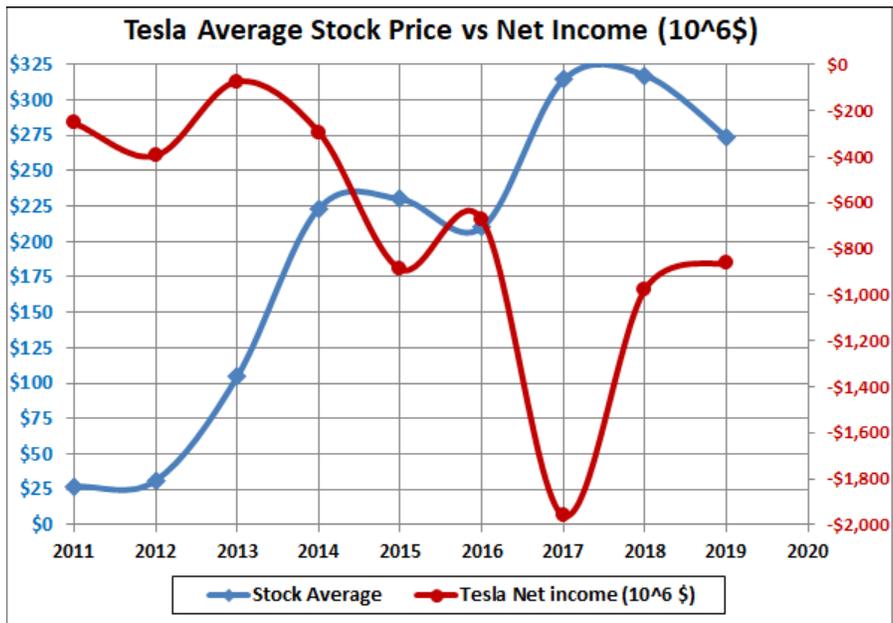
For other reasons why Tesla will succeed see: <http://www.roperld.com/Science/TeslaWillSucceed.pdf>.

References

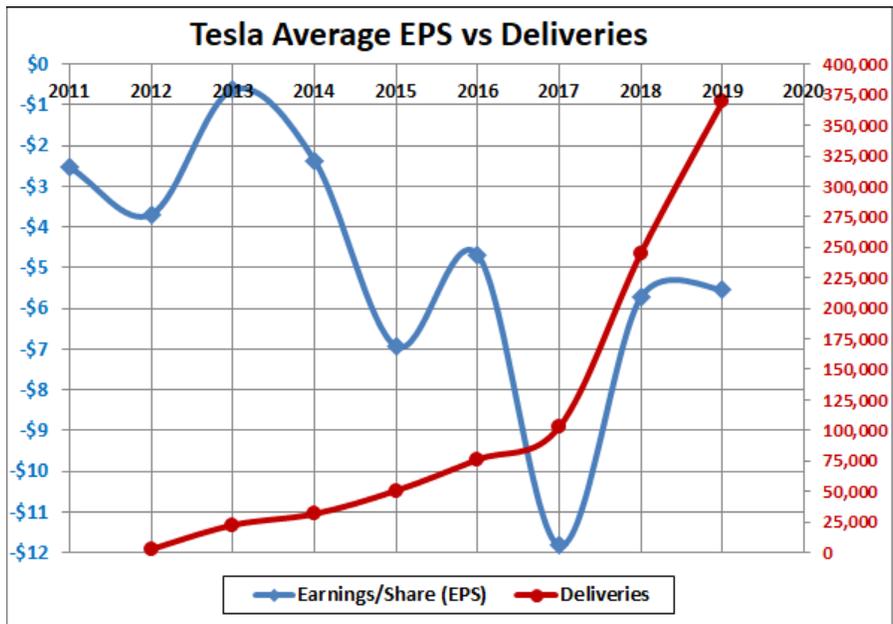
- <https://cleantechnica.com/2019/12/07/tesla-revenue-growing-exponentially-but-critics-cant-move-on/>

Appendix: Tesla Yearly Stock Average





Earnings/Share (EPS:GAAP) vs Deliveries:



GAAP = Generally Accepted Accounting Principles