Memorandum

Date: 17 March 2023
To: MGT 180 Instructor (s)
From: Bryan Lee
Subject: The real valuation of Tesla (TSLA) Stock Price

Tesla stock price is currently about $180. Based on various calculations from the exhibit (see excel spreadsheets that I posted), Tesla's stock price of $180 is priced fairly.

It would require about 25.3% YOY Revenue Growth from years 2023-2031 to be able to justify a stock of $180. In 2022, Tesla's stock went up by 51% from 2021. Therefore, an increase in 25.3% revenue is within range for Tesla.

The Automobile industry average enterprise value/EBITDA ratio of 5.9 is not a good measure to value Tesla's stock price. The reason for this is that Tesla is a fast-growing automobile producer. Same thing with the average EV/EBITDA ratio for the broader Consumer Discretionary sector of 13.4. Tesla is the world's leading EV producer and so the ratio of 13.4 is way too low to value Tesla. Both these ratios underestimate Tesla's value.

The upside case of Tesla's YOY Revenue Growth is the more reliable measure as compared to the base case (Price per share of $101.06) or downside case (downside case is way too pessimistic to be even considered to value Tesla's stock because EVs are doing so well currently, it gives a stock price of $65.46). The reason for this is that the upside case is closest to the adjusted YOY Revenue Growth of 25.3% which would give approximately a stock of $180 for Tesla. We do have to take into consideration that the cost of revenue for Tesla should be higher than what is projected from the exhibit and that the R&D growth should also be higher than what is projected from the exhibit. These two considerations should lower the stock price of the upside case of Tesla's YOY Revenue Growth (lower than $168.87). The upside case predicts a Price Per (Equity) Share or stock price of $168.87 and with these two considerations in place, we should expect less.

Will this conclude that Tesla's stock ($180) is overvalued and not fair priced as mentioned earlier? The answer is no. This is because the value of Tesla and all other EV companies would grow. Revenue of EVs in the US are projected to reach $61.18 bn and $457.60bn worldwide in 2023. Tesla, being the leading company in EVs, would be the most prospective EV company to put money in. Given the Electrical Vehicle market to grow in the future, it would make sense to value Tesla's stock above $168.87.

Based on Yahoo Finance, Tesla's beta is 2.07 currently, making this a riskier stock. This is the only downside that I see to investing in Tesla.

Additionally, we know that Elon Musk is more than capable of inventing new things. He owns multiple successful companies. As long as he oversees Tesla, a lot of investors could count on his companies to grow. But if he is no longer in charge one day, Tesla may seem to be riskier to invest in. And most certainly, the stock price would decline on the day he is no longer in charge of Tesla.

We can conclude that as of right now, Tesla's stock price of $180 is priced fairly, given that EVs are on the rise. A predicted stock price (Price per (Equity) share) of $168.87 from the upside case (see the exhibit spreadsheet ‘Upside Case’) would be the most reasonable case to predict a price of $180 for Tesla. We should also consider R&D and cost of revenue to be higher than what is assumed in the ‘upside case’. This would result in a predicted stock price of lower than $168.87, but this would not change the fact that the $180 is priced fairly because EVs revenue in the US and worldwide is increasing every year. In other words, people would be willing to pay a premium for Tesla stock given that it is the most successful EV company to date, which is why a stock of $180 is fair.