Write-Up

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Tesla is an automotive and technology giant, with a heavily debated stock valuation. Through some financial analysis, we can attempt to derive a reasonable stock valuation for the company. We conducted a series of analysis, a base discounted cash flow analysis, a sensitivity analysis, as well as a multiple analysis. After going through these analyses, we will decide a reasonable valuation for Tesla's stock.

We valued Tesla using a DCF framework, applying a 13% cost of capital to FCFs from 2025 to 2032. In the Base case, the present value of FCFs plus the terminal value yielded an enterprise value of approximately $267.9 billion. After adjusting for Tesla's $3.4 billion in debt, $23.2 billion in cash and marketable securities, and 3.6 billion shares outstanding, the implied equity value was $79.94 per share and a base case equity evaluation of $287 billion. Our DCF model predicted Tesla's estimated price per share to be $79.94, which is much less than expected compared to the value of $350.56 per share for Tesla that was Tesla's actual market price for a stock at the time of making the case. To test the validity of the DCF results, we performed a series of sensitivity analyses focused on Tesla's cost structure and growth plans. It is also important to note the assumptions made in the base case of the DCF to further understand why the DCF evaluated the price per share of Tesla lower than what it actually is: revenue growth decelerating from 27% in 2025 to 6% by 2032, gross margins stabilizing at 26%, and a 13% discount rate with a 4% terminal growth assumption.

FCF			11030.087	16028.7723	20613.0103	24655.3066	28453.0366	31513.323	34160.0973	36243.8342
									Terminal Valu	402709.269
Final FCF			11030.087	16028.7723	20613.0103	24655.3066	28453.0366	31513.323	436869.367	
Enterprise Value	$267,997.01									
Equity Value	$287,782.01									
Debt	3400									
Cash & Marketable Securities	23,185									
Shares Outstanding	3,600									
Price Per Share	$79.94									

Figure 1: Base Case

Using analyst-provided revenue growth projections, the Upside case produced an estimated share price of $121.47 and the Downside case resulted in a lower price of $55.19. The uncertainty surrounding Tesla's growth trajectory can be seen through this range of prices.

FCF			12119.0706	18469.15994	25724.69537	34059.37611	40871.6907	47692.92861	53951.6307	60467.44259
									Terminal Value	671860.4732
Final FCF			12119.0706	18469.15994	25724.69537	34059.37611	40871.6907	47692.92861	725812.1039	
Enterprise Value	417512.1337									
Equity Value	437,297.13	<- everything is in millions								
Debt	3400									
Cash & Marketable Securities	23,185									
Shares Outstanding	3,600									
Price Per Share	$121.47									

Figure 2: Upside Case

FCF			10045.9441	13530.1067	16471.5571	18780.6186	20426.2508	21187.0444	21750.39253	22435.7387
									Terminal Value:	249285.986
Final FCF			10045.9441	13530.1067	16471.5571	18780.6186	20426.2508	21187.0444	271036.3783	
Enterprise Value	$178,890.37									
Equity Value	$198,675.37									
Debt	3400									
Cash & Marketable Securities	23,185									
Shares Outstanding	3,600									
Price Per Share	$55.19									

Figure 3: Downside Case

We also examined how a higher cost of revenue would impact valuation. Raising cost of revenue percentages to 78-85% reduced Tesla's share price by a large margin, confirming that their valuation is largely dependent on its ability to maintain elevated revenue margins, as the share price fell to $38.26.

FCF			8578.16182	10920.5957	13257.236	13376.4528	10928.5176	12236.352	13340.9687	14175.5579
									Terminal Valu	157506.198
Final FCF			8578.16182	10920.5957	13257.236	13376.4528	10928.5176	12236.352	170847.167	
Enterprise Value	117964.995									
Equity Value	137749.995									
Debt	3400									
Cash & Marketable Securities	23,185									
Shares Outstanding	3,600									
Price Per Share	$38.26									

Figure 4: Higher Cost of Revenue

The last sensitivity we performed was stress-testing R&D by assuming Tesla must sustain 16% annual growth in R&D spending beyond 2028 instead of tapering to 8%. This heavier R&D burden reduced the valuation to $77.95 per share, exemplifying how costly innovation requirements could limit shareholder value even if revenues expand.

FCF			11030.0866	16028.7723	20613.0103	24655.3066	28357.2788	31183.9159	33411.1941	34837.1464
									Terminal Valu	387079.404
Final FCF			11030.0866	16028.7723	20613.0103	24655.3066	28357.2788	31183.9159	420490.598	
Enterprise Va	260824.841									
Equity Value	280609.841									
Debt	3400									
Cash & Marke	23,185									
Shares Outst	3,600									
Price Per Sha	$77.95									

Figure 5: Higher R&D

Because the DCF model predicted a much lower outcome for price per share ($79.94) than the actual value of $350.56 per share, we need to alter the revenue growth for each of the years to a higher value to achieve something closer to what is the actual truth. By changing the revenue growth decline percentage to 50%-30% from 2025-2032, we were able to get the DCF to match a similar value of around $350.66. Meaning that Tesla would have to have its revenue grow by an insane amount for the next 7 years to be able to match up with the current stock price based on our DCF.

Base Case YOY Revenue Growth	50%	47%	44%	41%	38%	35%	32%	30%

Enterprise Va	1242591.054		
Equity Value	1262376.054		
Debt	3400		
Cash & Marke	23,185		
Shares Outst	3,600		
Price Per Sha	$350.66		
Compound Annual Growth Rate (CAGR)		46.59%	

Figure 6: Needed Revenue Growth for DCF to Match Actual Stock Price

We compared Tesla's 2025 EBITDA calculation to different industry multiples to estimate its share price. When we use the automobile industry average EV/EBITDA ratio of 11.52, Tesla's implied price per share comes out to be $62.91. Instead, if we apply the broader consumer discretionary sector multiple of 26.09, we get a much higher implied share price of $135.53. This is because companies in that sector generally have higher growth expectations than the traditional automotive industry. We also calculated Tesla's equity value after adjusting for debt and cash holdings, and got the equity value of $226,491 million for the automobile industry average and $487,925 million for the consumer discretionary sector. The selected peer group falls between these extremes, with an equity value of $350,377 million. This implies that the traditional auto multiples undervalue Tesla's broader growth opportunities while tech-heavy multiples overstate them.

Automobile industry average	
EBITDA_2025	17943.255
Automobile Industry Ratio	11.52
Enterprise Value	206706.298
Equity Value	226,491
Debt	3400
Cash & Marketable Securities	23,185
Shares Outstanding	3,600
Price Per Share	$62.91
broader Consumer Discretionary sector	
EBITDA_2025	17943.255
BCDS Ratio	26.09
Enterprise Value	468139.523
Equity Value	487,925
Debt	3400
Cash & Marketable Securities	23,185
Shares Outstanding	3,600
Price Per Share	$135.53
Selected Peer Group	
Peer Group	
Toyota Motor Corporation (TM)	7.4
NVIDIA Corporation (NVDA)	40.67
Alphabet (GOOGL)	15.97
Ford Motor Company (F)	15.18
NextEra Energy (NEE)	16.86
XIAOMI-W (1810.HK)	26.08
BYD Company Limited (002594.S	6.81
EBITDA_2025	17943.255
EBITDA AVG/ Peer Group Ratio	18.4242857
Enterprise Value	330591.657
Equity Value	350,377
Debt	3400
Cash & Marketable Securities	23,185
Shares Outstanding	3,600
Price Per Share	$97.33

Figure 7: Industry Multiples

In order to capture both perspectives, we built a peer group that includes traditional car companies like Toyota and Ford, innovative EV leaders like BYD, and technology-focused firms such as NVIDIA, Alphabet, Xiaomi, and NextEra Energy. We selected these companies because Tesla is not just an automobile company, it operates more as a technology and energy company that uses vertical integration and invests in sectors like AI, batteries, and clean energy. The peer group average EV/EBITDA ratio of 18.42 gives us a price per share of $97.33, which sits between the automotive industry and tech-heavy industry.

Using sensitivity analysis, multiples, as well as DCF as our three primary methods, we did a final valuation to arrive at $102.41 per share. This plan weighs risks and rewards for Tesla's success, so it finds a balance. It does so because every strategy considers various aspects. The DCF reflects long-term fundamentals along with cash flow creation, even if it is quite vulnerable to assumptions such as terminal growth (4%), and also the discount rate (13%). Through grounding of the study in market comparables, the multiples valuation counteracts estimates across auto and consumer discretionary industries. The sensitivity analysis stress-tests the assumptions then proves to be important since adjusting cost structure and growing revenue may greatly influence valuation. The final valuation balances moderate and proactive situations by weighting each strategy equally. Revenue growth trajectories, cost of revenue, with discount rate are the most important assumptions to highlight since they influence the huge array of potential valuations. This combined approach reveals assumptions that affect valuation outcomes. Ultimately, it is this method that increases trust, and it avoids any over-reliance upon any one model.

Taking a Weighted Average:	
DCF:	$79.94
Sensitivity:	$128.71
Multiples:	$98.59
Weight	0.333333
Final Tesla Valuation:	$102.41

Figure 8: Final Valuation Calculation Methodology