

A Surging Company Against the Odds of Adversity in New Normal: The Case Analysis of Tesla

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Abstract: As one of the most ambitious and innovative companies in the automobile manufacturing industry across the world, Tesla visions itself with the mission to change and redefine the industry landscape of future mobility empowered by innovation and new transportation technologies. This research is conducted to examine how Tesla manages to surge against the odds of all the adversity manifested in the new normal through the lens of financial analysis of Tesla's annual reports. In light of the key concepts and financial performance and accounting data presented in the company report, the financial situation and growth of Tesla, specifically regarding its strengths and weaknesses, are analyzed. Besides, possible suggestions on risk control and financial viability, in the long run, are provided. Furthermore, the financial performance of Tesla analyzed from the key metrics are linked to the macroeconomic environment presented in the new normal, so as to consider the impacts on the company's revenues and the validity of the company's stock price performance for investment selection.

Keywords: Tesla, financial performance, financial analysis, risk control, market share

1. Introduction

The ambition and industry leadership of Tesla have been evidenced by its stock (NASDAQ: TSLA) with a valuation multiplied about 5 times year-to-date [1]. While the evidence presented in Tesla's annual reports is solid to support the continuing improvement of the company's fundamentals - including the deliveries and margins that have been trending higher over the recent years, much of the growth in Tesla's stock price has been the result of the expansion of the company's valuation multiple. In this regard, therefore, investors have been to a large extent betting on Tesla's leading status in the autopilot software technologies and electrical vehicle (EV) manufacturing industry - two significant surging trends perceived with the most potential in the present as well as the future vehicle market to steer the tech-led vehicle manufacturer out of the way to reshape the future of transport and mobility.

Since its establishment in 2003 in the US, Tesla has been striving for unprecedented innovation and manifesting the technological ambition of its founder, Elon Musk, to operate in automobile and energy fields, dedicating across the wide spectrum covering the marketing and retail of EVs, energy-saving equipment, solar panels, and autopilot technologies. Tesla's vision and mission have been shaped by modern society's growing concern and the escalating criticism leveled against the polluting and energy-intensive automobile industry, as Tesla recognizes that it is preferable to walk in front of

the public as well as lead the vehicle industry. While studies have been widely conducted on the stock performance of Tesla in the short term, especially in times of huge, negative events (e.g., brake failure and rising vehicle accidents), investors are interested in the long-term profits to expect from their investment decisions made. In light of this gap in the extant research, this study examines the financial performance and accounting data in Tesla’s annual report to examine the potential of the company to rise above all the adversity amid the current economic environment.

2. Analysis

2.1. Financial Performance of Tesla

The first metric used to assess the financial performance of Tesla in the present study is the total revenue of the company, as shown in Table 1. As calculated from the given data, Tesla has experienced an increasing rate of revenue growth over the observed three years, despite of the adverse impacts and disruptions of the COVID-19 pandemic such as temporary closure of manufacturing facilities, compensation and employment adjustments, increase port congestion, increasing costs for logistics [2] and supply chains, and intermittent, shortfall and delay of semiconductor supply [3]. While from 2019 to 2020, the revenue growth rate at Tesla was 28.31%, this number almost tripled from 2020 to 2021, hitting 70.67% against the odds of the new normal to imply negative economic environments for automobile businesses and supply chain activities in the industry. Therefore, it is suggested that over the recent 3 years, Tesla has been selling more products one year after another, not only seemingly unaffected but even outperforming in the new normal.

Table 1: Total revenue of each year from 2019 to 2021 (United States Securities and Exchange Commission, 2021).

	Year ended December 31		
	2021	2020	2019
Consolidated financial statements of operations data			
Automotive sales (\$, in millions)	44,125 (79%)	24,604 (27%)	19,358
Total revenue (\$, in millions)	53,823 (70.67%)	31,536 (28.31%)	24,578
	81.9	77.4	78.8

Following this, the stock price of the company is analyzed to capture the potential of Tesla to investors. As shown in Figure 1, the stock price has manifested a positive trend from 2019 to 2020 and has been soaring from the end of the year 2020 throughout the first three quarters of the year 2021. Then in the last quarter of the year 2021, its stock price fell from its peak at 738.56 to around 525 by the end of the year 2021.



Figure 1: Tesla’s stock price over the past 5 years (Source: <https://www.msn.cn/zh-cn/finance/a24kar?ocid=ansMSNMoney11>).

Next, this study focuses on using liabilities as yet another key metric to interpret the financial situation of Tesla operating in the current economic environment, where uncertainty abounds in the new normal. As shown in Table 2, its liabilities of Tesla increased by 5.87% from 2019 to 2020, and this increasing trend continued from 2020 to 2021, when a further increase in liabilities by 7.49% was observed. In this respect, hence, it is suggested that Tesla did not rush to clear its liabilities and pay its debt. Instead, the company was bold to take on more liabilities so as to increase its assets, thus focusing on growing the company.

Table 2: Total liabilities of each year from 2019 to 2021 (United States Securities and Exchange Commission, 2021).

	Year ended December 31		
	2021	2020	2019
Consolidated financial statements of operations data			
Total liabilities (\$, in millions)	30,548 (7.49%)	28,418 (5.87%)	26,842

Finally, this study concentrates on the gross profit margin of Tesla, so as to examine the company’s financial performance after factoring in expenses such as cost of production and other operations management. As indicated by the calculated results in Table 3, the total gross margin of Tesla has been increasing steadily from 2019 to 2021, which thus suggests the stable growth in the net profits of the company, and in the meantime evidences the solid and valid valuation of Tesla’s stock price for long-term share holders.

Table 3: Total margin profits of each year from 2019 to 2021 (United States Securities and Exchange Commission, 2021) [6].

	Year ended December 31		
	2021	2020	2019
Consolidated financial statements of operations data			
Total gross profit (\$, in millions)	13,606	6,630	4,069
Total gross margin	25.3%	21.0%	16.6%

2.2. Risk Analysis

In light of the value proposition of Tesla to redefine and lead the future mobility with research and technology innovation, it comes with barely any surprise that the company has been an investment-intensive player committed to spending on research and product development. Indeed, as revealed in the mission statement of Tesla's 2021 annual report [4], Tesla seeks to further ramp its production and deliveries to global markets, investing to augment new manufacturing capacity and expanding its global operations to enable the increased deliveries and adoption of their vehicle products to achieve further revenue growth in an organic approach. However, to examine the operation cost of Tesla, it is found that the cost inputs of the company have taken up a significant proportion of its total revenue, which peaked at 20% in the year 2019. In the meantime, the cost of sales, general and administrative is huge to the extent of surpassing research and development, which is only around half of the selling and marketing part.

Table 4: Operation costs at Tesla of each year from 2019 to 2021 (United States Securities and Exchange Commission, 2021).

	Year ended December 31		
	2021	2020	2019
Consolidated financial statements of operations data			
Research and development (\$, in millions)	2,593	1,491	1,343
As a percentage of revenues	5%	5%	5%
Selling, general and administrative (\$, in millions)	4,517	3,154	2,646
As a percentage of revenues	8%	10%	11%
Restructuring and other (\$, in millions)	-	-	149
As a percentage of revenues	0	0	1%
Interest expense (\$, in millions)	371	748	685
As a percentage of revenues	1%	2%	3%
Total	14%	17%	20%

In terms of absolute numbers, Tesla typically spends over \$4,500 million on a yearly basis, which is a quarter more than the company's capital expenditure than its industry competitor General Motors, whose scale is 20 times larger than Tesla [1]. In this regard, therefore, the operation costs of Tesla is considered particularly high when compared to other peers in the industry. This can put Tesla's financial health at risk because the revenue and net income generated from sales may not cover the high cost, given the relatively high price of Tesla cars, which are not a consumer product affordable

to many. When the high operation costs are not covered, Tesla may find itself struggling unless it has new models that sell well to secure its finance and business functioning.

3. Discussion

Analysis results generated from the Form 10-K of Tesla in 2021 lend evidence to the financial health and risks projected for the vehicle manufacturing leader in the new normal. Most notably, Tesla has been surviving and even thriving through the adversity against all the odds of the new normal, overcoming the difficulties it once encountered regarding the possibility of failing to meet the growing vehicle manufacturing targets and global delivery plans, both of which have been of a proven harm to the company business and prospects [5]. To address this, Tesla has been focusing on increasing its manufacturing technology and thus enhancing the delivery capacity, as reflected in its aggressive investment in Gigafactory in the world, spreading across its pulse markets in China (Gigafactory Shanghai), the US (Gigafactory Texas and Gigafactory New York), and EU (Gigafactory Berlin) since 2016.

From 2019 to 2021, Tesla's efforts to invest in the vehicle production and delivery expansion plans have been paid off, in light of the satisfactory automotive sales performance that has been increasingly accounting for the soaring total revenues generated on an annual basis. Since 2019, the automotive sales of Tesla has accounted for 78.8% of its total revenue, followed by 77.4% in 2020 when the COVID-19 pandemic swept across industries and hit the global supply chain of the automotive industry hard, and recovered to 81.9% in 2021 amid the new normal - suggesting Tesla's finding the way out of the industry-level economic plight. In 2021, Tesla is proud to announce its total revenue achieving \$53,823 million, reaching the historical high record of annual growth of 70.67% against the odds of adversity manifested by the global pandemic, with 81.9% attributed to the automotive sales of the company. In this regard, therefore, this should evidence the increasing manufacturing and delivery capacity of Tesla, as well as investment efforts and intelligence on global infrastructure and vehicle affordability (e.g., Model 3) to have well paid off. In light of this success, it comes with no surprise as Tesla announces in its 2021 annual report to continue to ramp its global production, focusing on building new manufacturing capacity as well as expanding operations to thus improve deliveries and Tesla models, ultimately aiming for further revenue growth [6]. Furthermore, the delight continuously evidenced by the increasing sales growth of Tesla regardless of the financial struggle experienced across businesses and industries should be captured as a dependable and valid metric for investors to select their stocks and strengthen their confidence in the organic growth success of Tesla.

However, the analysis results indicate the Tesla is exposed to the risk of high operations cost, which was especially the case in 2019 and before when its cost accounted for over a fifth of the company's total revenue. From 2019 to 2021, Tesla has been working on its cost control, focusing specifically on reducing the operation costs and increasing the gross margin, thus strengthening its financial health and cash chain amid the uncertainties of the continued duration of the COVID-19 pandemic. In particular, given the rising level of liabilities of Tesla, it matters that the company achieves massive sales against the odds of the new normal adversity to thus bring increasing revenues to increasingly help solve the company's debts.

4. Conclusion

To sum up, from the discussion manifested in the present study, Tesla has experienced positive and exciting growth over the past 3 years, against all the odds of economic and market opportunity presented by the new normal. However, in light of the uncertainty of changes and duration associated with the global COVID-19 pandemic, Tesla knows it better to make responsive, and proactive

changes with respect to the macroeconomic conditions monitored, thus assuring its flexibility in business operations and financial health to thus optimize and evolve its performance accordingly. Indeed, as reflected in the company's annual report, Tesla has been working on strengthening its revenue and sales performance in the global markets by increasing its manufacturing capacity and augmenting its ambition of global delivery plans, specifically through accurately projecting the regional demands for Tesla models to locate its manufacturing facilities and assembly lines to leverage the most of geographical proximity to cost reduction and product affordability, thus deploying the infrastructure, production as well as other resources accordingly.

While the revenue and sales performance of Tesla has manifested a proven delight to its investors, whose confidence has been strengthened not only by Tesla's stock price multiplied 5x but also the fact that it has been outperforming continuously through the pandemic, the true fact that should not be ignored is the risk of cost control of the company. This is particularly the case when Tesla is measured against General Motors using capital expenditure, as the former is considered to run a greater danger of cost control that demands continuously high-performing sales and new model development to keep it safe from cash chain break resulted from the mounting liabilities. Hopefully, Tesla is observed to have been reducing its operation costs over the past 3 years on end, thus tuning itself to a business development direction of enhanced financial health and sustainability.

Taken together, it should be concluded that Tesla has achieved a positive situation in financial health, and worked to effectively address the risks of cost control over the past 3 years in response to the uncertainties surging in the new normal. In this sense, therefore, Tesla is considered to as a high potential company to thrive in the new normal future.

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References

- [1] Gilson, S. C., & Abbott, S. L. (2018, April 10). *Tesla Motors (B): Merging with Solar City. 6 Big Risks of Investing in Tesla Stock*. Retrieved from <https://www.investopedia.com/articles/markets/102815/biggest-risks-investing-tesla-stock.asp>.
- [2] Liu, S. (2021). *Competition and valuation: a case study of Tesla Motors*. *IOP Conference Series: Earth and Environmental Science*, IOP Publishing, 692(2), 022103.
- [3] *Nasdaq.com*. (2020, October 16). *Telsa Downside: How Tesla Stock Could Fall Below \$150*. Retrieved from <https://www.nasdaq.com/articles/telsa-downside%3A-how-tesla-stock-could-fall-below-%24150-2020-10-16>
- [4] Tao, R. (2016). *Tesla Supply Chain - Custom-build World Class Supply Chain*. *Tradegecko.com*. Retrieved from <https://www.tradegecko.com/blog/tesla-custom-built-supply-chain>.
- [5] *Tesla Inc.* (2017). *10-K Annual Report 2017*. Retrieved from <https://www.last10k.com/sec-filings/1318605/0001564590-17-003118.htm>.
- [6] *United States Securities and Exchange Commission*. (2021, February 8). *Tesla Inc. 10-K Annual Report 2021*. Retrieved from https://sec.report/Document/0000950170-22-000796/#item_8_financial_statememts_supplementar.