

Tesla's Financial Position in International Markets

Factors and Changes in Tesla's Financial Position

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Abstract: This paper discusses the company Tesla Inc. to examine its financial situation in the international market. Tesla Inc. is a publicly traded U. S. car manufacturer that produces battery storage and photovoltaic systems in addition to electric cars. Therefore, we analyze the factors and changes in Tesla's financial position. We chose Tesla because it is one of the largest and well-known companies in the world. The company is significantly influenced by the international market. We have focused specifically on Tesla's financing from its inception to the current situation. In addition, we are going to compare the current position analyzed in terms of finance in context of international markets to its future position and how Tesla will expand in the future. Furthermore, we are going to have a look at Tesla's revenue in different countries and the earnings per share. Another important point is the impact of Elon Musk on the company because without him Tesla would not have grown and developed so rapidly and not be in such a good position today. This paper focuses on explaining Tesla's influence in international markets and attempts to predict future changes according to its financial position, stock price and strategies.

Key Words: Tesla; Strategy; International Markets; Elon Musk

1 Introducing Tesla

1.1 Firm History in terms of the Financial Situation

The company was incorporated as Tesla Motors, Inc. on July 1, 2003, by Martin Eberhard and Marc Tarpenning and was named after the Serbian American inventor Nikola Tesla. Eberhard and Tarpenning served as CEO and CFO, respectively. Tesla is building a world powered by solar energy, running on batteries, and transported by electric vehicles (Tesla Inc., 2022).

Tesla was founded in 2003 when a group of engineers, passionate about electric cars, wanted to show people that they didn't need to compromise when considering buying a car. The two self-financed the start-up until the company opened for Series A funding from external investors. Musk was already a successful entrepreneur who had made his fortune at PayPal. He was involved in directing the Series A financing, investing millions of his own capital and became president of the company. In a series B financing round in 2006, Google founders Sergey Brin and Larry Page also invested in Tesla (Clausen, 2017).

In July of the same year, the first prototype of the Roadster was presented. After a few more years of development, the final production model was launched in 2008. At that time, both founders had left the company and Michael Marks temporarily took over as the CEO. Afterwards, in November 2007, Ze'ev Drori took over as Eberhard's permanent successor. Later the first Roadster model was delivered to Elon Musk and Co-founders Eberhard and Tarpinning finally left Tesla entirely (Stoldt, 2022).

In October 2008, Musk took over the management of the company and dismissed 25 percent of the workforce. However, this leadership transition did not go smoothly. In 2009, Eberhard and Tarpinning filed a lawsuit against Musk and their former company, accusing Musk of forcing them out of the company they founded. The lawsuit was dropped later that year, but the company was still on the verge of bankruptcy. It had only \$10 million in cash, which was less than what was needed to fulfill and deliver existing orders for cars. Daimler came to the company's rescue in May 2009 when it acquired a 10 percent stake of the company for \$50 million (Stoldt, 2022). Soon after, Tesla secured a massive loan of \$465 million from the U. S. Department of Energy. This provided the company with much-needed capital for its long-term survival and moved its headquarters to Palo Alto in Silicon Valley.

A major event in Tesla's history was its last initial public offering in June 2010, when it went public on NASDAQ at a price of \$17 per share, raising \$226 million (Stoldt, 2022). Since then, Tesla developed the world's first all-electric premium sedan, the Model S, which became the best car in its class in every category. In 2013, Tesla made its first quarterly profit and announced in the following year the first Tesla Gigafactory in Nevada. The Gigafactory is Tesla's main car battery manufacturing plant. In 2015, the company expanded its portfolio with the Model X. Tesla also began developing its semi-self-driving system for some of its vehicles. In 2016, the Tesla Model 3 was introduced. This was a low-cost and high-volume electric vehicle that went into mass production in 2017. Around this time, Tesla Motors officially changed its name to Tesla Inc. to better represent the company's diversification away from pure automotive production.

The year 2018 started off badly for Tesla. After the company missed some of its financial projections, investors began selling Tesla shares and the company lost 5 percent of its value of over \$10 billion (Stoldt, 2022). Tesla also had supply chain problems. In August of that year, Musk became embroiled in controversy when he tweeted that he would take a private ownership of the company as soon as Tesla's stock reached \$420. This stirred up the market and investors rushed to buy stocks. This also triggered an investigation by the U.S. Securities and Exchange Commission. As a result, Musk was fined \$20 million. Musk also decided to step down from his position as the president but remained CEO.

One of the next big events in Tesla's history was the launch of a roadster into space. In March 2019, Tesla unveiled its Model Y SUV. Around the same time, Tesla announced that it would build its Gigafactory 4 near Berlin, Germany (McKenzie, 2018). After earlier disputes with California regulatory agencies over the COVID-19 restrictions, Tesla moved its headquarters from Palo Alto to their Gigafactory at Austin, Texas on December 1, 2021. On June 29, 2022, Tesla celebrated its 12th anniversary as a public company (Stoldt, 2022).

1.2 Factors of Tesla's Success

There are several factors for Tesla's success. Strong scientific research and innovation capability are the most important ones. Tesla spent about \$20 billion on research and development over the past 10 years, an investment that other leading car companies have not made (iNews, 2022). Tesla models with different prices have laid a good foundation for a high volume of customers. Tesla can provide different products for various customer needs to increase sales and profits. The company's rapid rise has been strongly supported by the U.S. government. Tesla received a \$465 million low interest loan from the federal government in its initial stage of development, which helped Tesla to overcome the financial difficulties in the early stages. In recent years, environmental protection has become one of the most important issues in the world. Online and offline marketing channels have increased Tesla's sales. Online, customers can customize and personalize models

through the official Tesla website and pick up their car in the store. At the same time, Tesla has established experience stores across the country (Chen, 2022).

2 Tesla's Current Financial Position in International Markets

2.1 Transnational Strategy

Tesla's strategy at the international level is called the transnational strategy. With this strategy, Tesla seeks to simultaneously achieve low costs through economies of scale, locational advantages and learning effects. Tesla differentiates its cars across geographic markets to accommodate local differences. There are different strategies that Tesla has pursued and combined, explained in the following subsections (Sudian, 2021).

2.1.1 Direct Selling

Tesla sells its cars directly to customers in its stores and galleries or through the Tesla website. Elon Musk states that the main reason for this direct selling, and not selling through dealers, is the fundamental conflict of interest for dealers between selling gasoline vehicles, which represent the majority of their business and simultaneously selling the new technology of electric cars. The benefits of direct sales include a greater customer satisfaction, as Tesla can better match its production with consumer preferences and on the other side lower overall costs because of the absence of dealer costs such as inventory financing and insurance, advertising and sales commissions (Kamkoun, 2018).

2.1.2 Certified Pre-Owned Program

Tesla uses a buyback program called Certified Pre-Owned in countries such as Germany, France, Sweden, Norway, and Canada. Under this program, a Tesla Model S is sold with the right to return it to the company after three years for a refund of 43 percent to 50 percent of the original price (Kamkoun, 2018).

2.1.3 Strategic Positioning of Stores and Galleries

Another strategy employed by Tesla in the foreign market is to deliberately position its stores and galleries in high foot traffic and high visibility retail locations, such as malls and shopping streets that people regularly visit in a relatively open-minded buying mood. Musk wants to reach people before they decide to buy a new car (Kamkoun, 2018).

2.1.4 Local Responsiveness

As one of its strategies to attract customers in the foreign markets, Tesla customizes its cars to meet local needs and to satisfy the tastes and preferences of its customers. For example, in response to customer feedback, Tesla made some modifications to its Tesla Model S in China, including an "Executive Rear Seat" option, which costs \$2000 more than the standard model and is designed to make the rear seat experience more comfortable (Kamkoun, 2018).

2.1.5 Related Diversification

One strategy used by Tesla for global expansion is related to diversification through strategic alliances with established international car and battery manufacturers. Tesla actively collaborates with foreign companies in research and development and in the production of electric power train components (Kamkoun, 2018).

2.2 Tesla's Financial Situation

Initially, Tesla's two founders self-financed the start-up. But the company soon opened to external investors. Among others, Elon Musk and Google founders Sergey Brin and Larry Page invested in Tesla. In addition, Tesla secured a substantial loan from the U. S. Department of Energy due to its sustainable objectives and goals. In 2010, the company finally opted for an initial public offering (McKenzie, 2018). Through its transnational strategy, Tesla generates global revenues. The company has manufacturing facilities in the U.S., Germany, and China as well as operations across the Asian Pacific and Europe. The presence in different countries protects the company from the risk associated with economic and political factors of a specific region (Carpenter, 2022). In the following figure, Tesla's revenues are broken down by country.

Tesla's revenue in the United States, China, and other markets from FY 2018 to FY 2021

(in millions U.S. dollars)

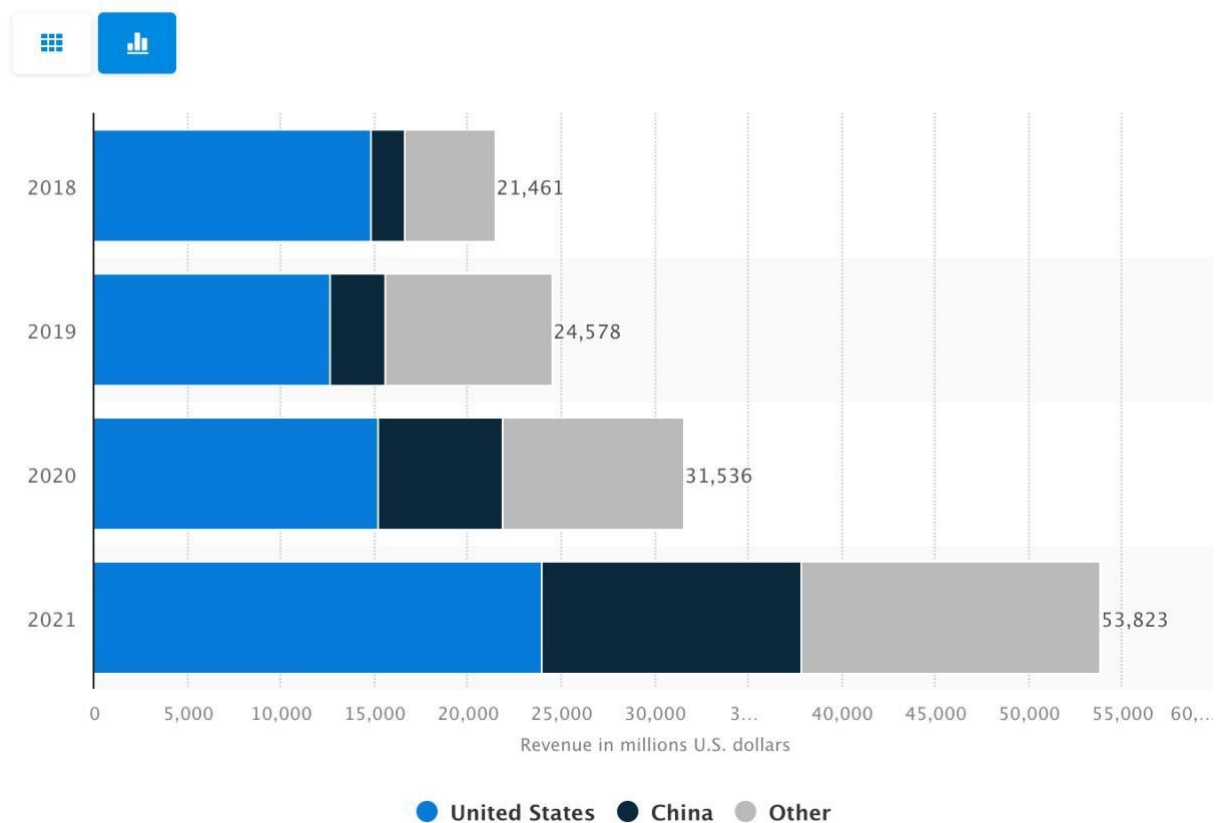


Figure 1: Tesla's revenue in the United States, China, and other markets from FY 2018 to FY 2021, (Carlier, 2022a)

Figure 1 shows that a significant part of the sales comes from China. Moreover, Tesla's total revenue doubled from 2018 to 2021. The reason for this is a high demand, driven by the green energy movement. On the other hand, Tesla had to face several issues in 2019 and 2020, such as higher interest rates, supply shortages because of the Lockdown in China and battery production issues. These are reasons why the total revenue grew slowly during these years (Arrieche, 2022).

With a 62 percent share of global electric car deliveries so far in 2022, China is by far the most important market for Tesla. Therefore, Tesla now faces capacity growth in the US and Europe with vertical integration

increasing significantly (Kleinhans, 2022). Total revenues increased by 56 percent to \$21,5 billion in 2022, up from \$13,7 billion in 2021.

Number of Tesla vehicles delivered worldwide from 1st quarter 2016 to 3rd quarter 2022

(in 1,000 units)

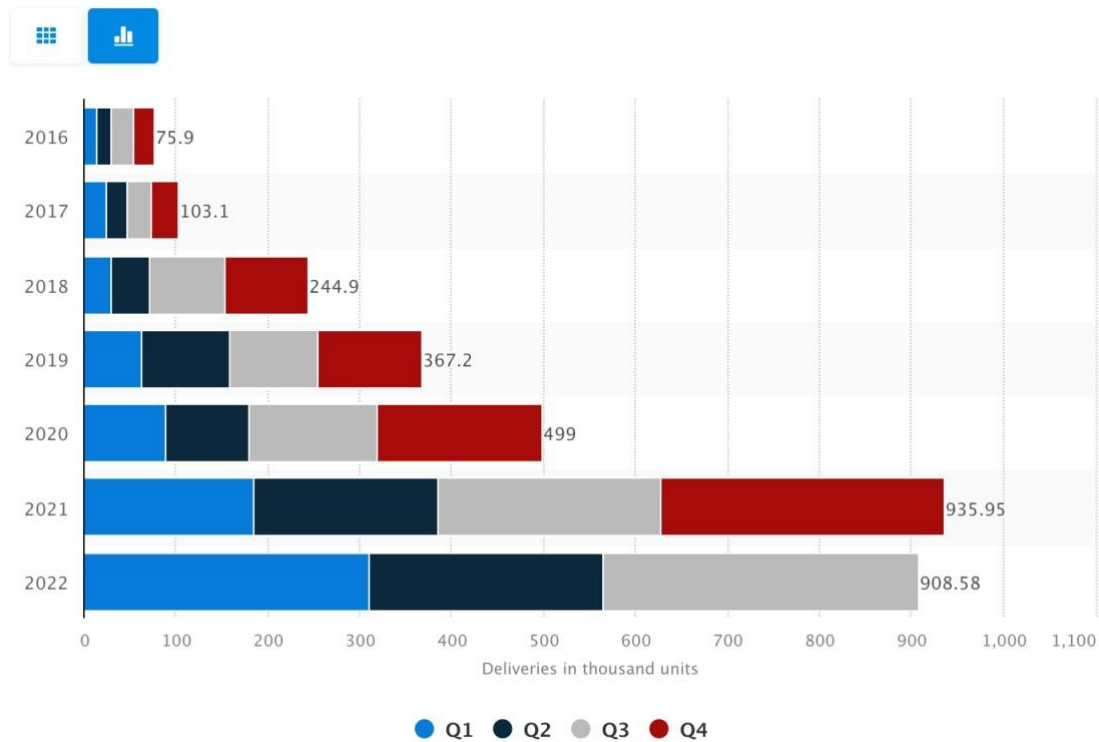


Figure 2: Number of Tesla's vehicles delivered worldwide from 2016-2022, (Carlier, 2022b)

Revenue was particularly influenced by the growth in vehicle deliveries (Figure 2) but also by the positive development of Tesla's business operations and the stock split in 2020 (Tesla Inc. Corporations, 2022). As shown in the figure Tesla outperformed analysts' expectations for vehicle deliveries in 2021 and continued this trend even further in 2022, reaching the same amount in 2022 without quarter 4.

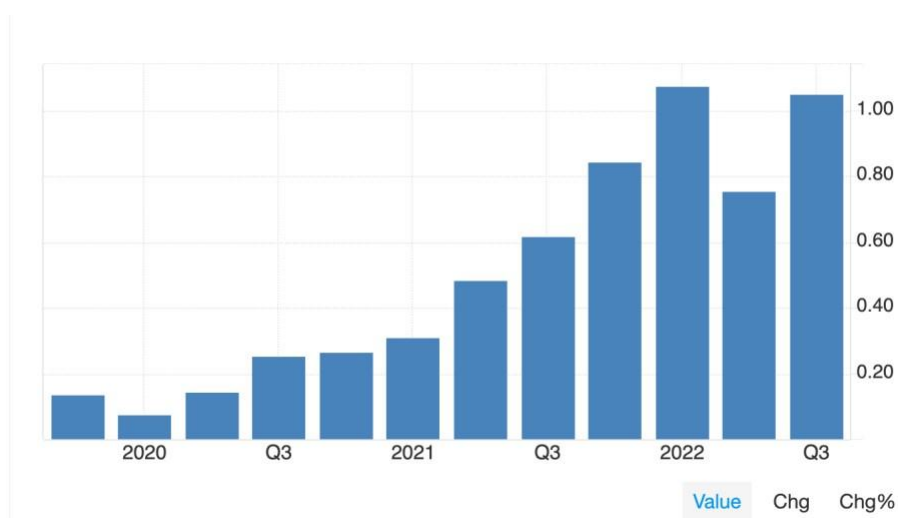


Figure 3: Tesla Earnings per Share, (Trading Economics, 2022)

The same applies to earnings per share as shown in Figure 3. Throughout 2021 Tesla exceeded expectations regarding earnings per share which tripled since 2021 (Gortin, 2022). The car producer also had a negative foreign exchange impact of \$250 million on its earnings as the U.S. dollar strengthened against other currencies (International Finance, 2022).

2.3 Impact of Elon Musk

Elon Musk has a significant influence on his company. This has both, positive and negative consequences for Tesla. Directly in the beginning, when the founders left the company in 2008 and Elon Musk took over, the change in management did not go smoothly. He sacked 25 percent of the workforce, and the former founders sued him for various reasons. This plunged the company into a financial crisis. Daimler came to the company's rescue in May 2009 when it purchased a 10 percent stake in the company for \$50 million (McKenzie, 2018). Due to his recent Twitter purchase and the subsequent large wave of redundancies, Elon Musk no longer enjoys the best reputation. As a result, he and his company Tesla are being questioned. Many Twitter users no longer want to buy Tesla (Baumann, 2022). As a result, the Tesla's stock has drastically lost its value (Richthofen, 2022). However, Elon Musk also has a positive impact. He is considered as a great entrepreneurial personality, visionary and motivator. In addition, he is equipped with a high level of capital power and high credibility factor for initiating and implementing Tesla's strategy to produce an affordable and pollution-free car (Clausen, 2017).

Elon Musk also has a major influence on other stocks only through Twitter. He professed his love for DOGE, a cryptocurrency, in a series of tweets on February 4, 2021, which caused the share price to rise by over 50 percent in just one day. Another example is when he tweeted that Bitcoin can be used to purchase a Tesla. Bitcoin reached about \$65,000 within a month only because one of the biggest companies in the world accepted it as a payment method (Oosterbaan, 2021).

3 Teslas Future Position in International Markets

3.1 Opportunities and Risks

As mentioned in chapter 4, Tesla has already become an important player in the Chinese market. Due to the high competition in the electric vehicle sector in China, Tesla lowered the price of its vehicles to boost sales and gather a higher market share (Bloomberg, 2021). This price reduction can possibly create a risk to lower Tesla's margins in the future because the price of Teslas in China will be below the rest of the world for the next decade. Currently the Model Y produced at Tesla's Gigafactory in Shanghai has a 30 percent gross profit margin and the Model S has a gross profit margin of approximately 40 percent (Loveday, 2021). As a result, profit margins could decrease in the coming years due to lower-cost competitors in the Chinese market. Since China is the "linchpin" for Tesla's profit according to some analysts, this could entail massive financial problems and risks in the future (CNBC, 2021).

In the upcoming years Tesla will pursue a virtual sales strategy. Because of Tesla's geographical expansion the operating expenses increased dramatically. As part of this sales strategy, Tesla will drop expensive showrooms and instead lease low-coast spaces in warehouses and mall parking lots. Most of the sales will be handled by a centralized virtual store where the online sales representatives will manage the entire transactions remotely (Dow, 2019). This approach shows how fast Tesla is adapting to the digitalization process.

Furthermore, Tesla opened 2 new production facilities in Germany and Texas, which will approximately double the company's production capacity. This enables Tesla to further expand their sales in Europe and America.

Per-Share Earnings, Actuals & Estimates Tesla Inc.

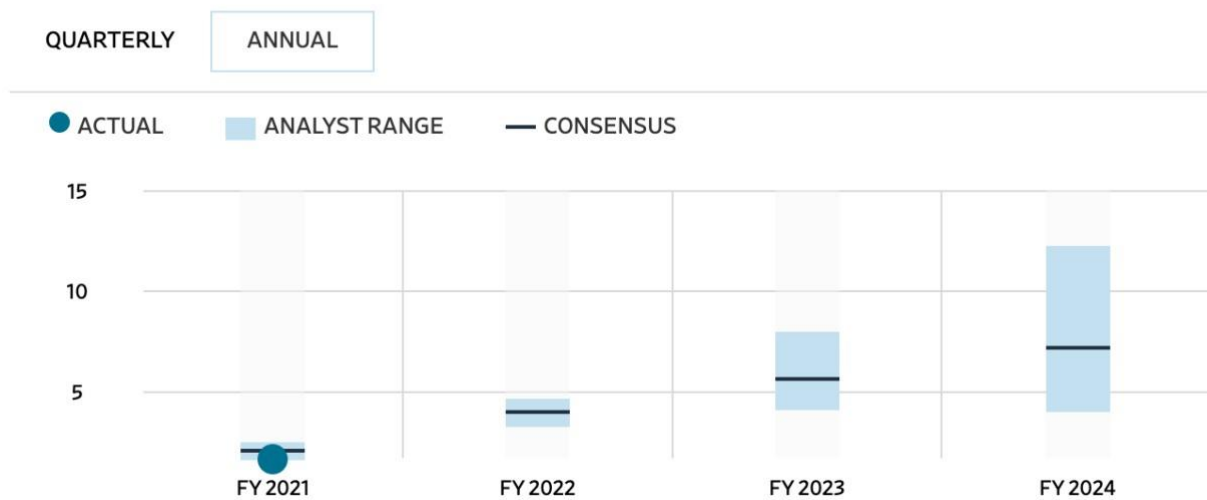


Figure 4: Estimated Yearly Per-Share Earnings, (WSJ Markets, 2022)

For the upcoming quarters, the new factories and Tesla's pricing will ensure that the company's automotive profit margin will exceed 30 percent (Levin, 2022). As shown in Figure 4 analysts predict that Tesla's earnings per-share will increase year by year. Currently earnings per share are \$1.29 which is expected to increase to approximately \$7 in 2024. This can be explained by the just mentioned declaration as well as the fact that new products will be launched in 2023 which will lead to a demand boost (Sozzi, 2022).

Apart from the overall very positive future development, there are also risks that Tesla has to face especially in the foreign market. Compared to hybrid and gasoline vehicles, Tesla's zero emission electric cars are very expensive. Potential purchasers with low incomes cannot afford these types of cars and will buy from competitors. The competition in the electric car sector in general will increase as many countries no longer allow the production of gasoline-powered cars. Many companies will switch their production to hybrids and electric cars which generates a higher competition. Furthermore, Tesla offers only a limited number of charging stations which must be expanded in the future. Tesla also lacks local joint ventures abroad which could be a great opportunity for faster market entry and access to potential customers and distribution systems (Kamkoum, 2018).

3.2 Tesla Stock Predictions

An attempt to anticipate the future value of a stock is called a stock market prediction. These forecasts are typically based on technical and fundamental analysis of a company and on charts. Stock predictions are influenced by external factors and do not necessarily reflect reality (Capital.com, 2022).



Figure 5: Earnings and Sales Forecasts, (CNN Business, 2022)

As mentioned in chapter 4.1 and shown in Figure 5 the earnings per share and sales will increase dramatically in the next years. Because Tesla had to face several problems like higher interest rates, supply shortages because of the Lockdown in China and battery production issues their stock price decreased in the last months. However, these problems are only temporary and will no longer play a major role in the future (Arrieche, 2022).



Figure 6: Tesla Stock Price Forecast, (CNN Business, 2022)

As shown in Figure 6 Tesla's stock price will probably increase within the next 12 months. There is a probability that the price will go up to \$450 or even decrease further to \$85. The median estimate represents an increase of 85.05 percent from the current price (CNN Business, 2022). According to a forecast from Wallet Investor, the Tesla stock price will be around \$250 at the end of the year (Wallet Investor, 2022). The algorithm-based forecasting service even estimates that the stock price will rise to \$470 by the end of 2024 and even to \$746 in October 2027. This leads to the conclusion that the recommendation for Tesla stock right now is buy and hold (Arrieche, 2022).

4 Conclusion

In conclusion, Tesla has experienced many ups and downs in the past. These factors, the transnational strategy and the influence of Elon Musk have contributed to Tesla being one of the best financially positioned companies in the world. Not only has Tesla's revenue more than doubled since 2018, also the number of vehicles delivered and its earnings per share have tripled, suggesting that the growth trend will be maintained in the coming years.

Tesla focusses currently on expanding its market share in China and adding new production capacities in Europe and the U.S. to increase its sales. Simultaneously Tesla will face increased competition in the future, as many countries prohibit the sale of gasoline cars. As a result, many companies will switch their production to hybrid and electric cars which will be a more affordable alternative to Tesla's zero emissions cars. Based on the current trends it is predicted that the earnings per share and the stock market price will increase dramatically in the future. This ensures that Tesla will be in an even better financial position in the future even though Tesla has lowered prices in China and is generating less revenue to remain competitive.

2023 will be a turning point for Tesla as it keeps up its rapid volume growth, enters new markets, optimizes its manufacturing footprint, and receives advantages from the reduction of the inflation which will reduce its costs and increase demand in the future (Sozzi, 2022).

All in all, Tesla has one of the most fascinating stories in the automotive industry due to its pricing power, superior cost structure, outstanding execution, secured supply and current establishment of more relevant capacities to sustain expansion (Sozzi, 2022).

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