

Research on the Corporate Value of Toyota Based on Multiple Valuation Method

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Abstract. Toyota corporation's stock prices are determined by valuations, which are important in making a comparison between the company's financial status and stock price to its principal competitors' stock prices. The most common multiple valuation methods used by analysts include the Price-Earnings (P/E) ratio and the Enterprise Value to Adjusted EBITDA (EV/EBITDA) ratio. This paper uses these two compelling ratios to describe the stock prices of a corporation throughout the process of analyzing the financial ratios of a financial statement. The P/E ratio and EV/EBITDA, two key multiple valuation tools, as well as the financial data from Toyota Industries Group's primary competitors, are used to determine whether the stock prices of Toyota corporation over the past three years are overvalued, undervalued, or fair. The conclusive findings that can be drawn from the enterprise values of Toyota corporation are that they are undervalued, even though the stock prices are appropriate. Besides, through stock price valuation, investors can make judgments and choose to continue to hold or sell.

Keywords: Corporate value; Multiple valuation; Toyota.

1. Introduction

The manufacturing industry is very important to society since it is responsible for laying the foundations upon which people's daily lives are built. Toyota is one of the world's most well-known and respected automakers, since it was established in 1937. Xu, et. al. (2020) asserts that since the COVID-19 outbreak, various industries were affected, especially in the automotive sector [1]. Even while global supply networks have shown their endurance and flexibility in recent decades, there has been a disruption in the supply chain for raw materials, intermediate commodities, and finished goods. Hence, businesses operating in this sector must modify their strategy to deal with the situation effectively. This paper aims to evaluate the enterprise value of Toyota based on multiple valuation method. The two primary multiple valuation methods are used to investigate the stock performance and enterprise values of Toyota Industries Group and its primary competitors include the price-to-earnings ratio, or P/E ratio, and the enterprise value to earnings before interest, taxes, depreciation, and amortization ratio, or EV/EBITDA ratio, as Before commencing the phase when the data is being processed.

According to Zhao (2022), the P/E ratio is the most popular valuation technique used by industry professionals in the stock market [2]. Lower price-to-earnings ratios indicate that a stock's price is low, resulting in increased returns in the subsequent term. Another valuation tool is the enterprise value to earnings before interest, taxes, depreciation, and amortization ratio. When using the EBITDA technique a cash operating profit is often used to evaluate and monitor the value of a firm, and the cash flow available to repay debt. EBITDA, which provides more information than EBITA or EBIT, is the most accurate measurement of a company's financial state, profitability, capacity to create cash, liquidity risk, and credit risk [3]. EBITDA is also the best predictive of a company's future credit risk. Because taxes and other costs are not the same in every country and area of the world, it's also possible to compare businesses in different countries. Price-to-earnings ratios and enterprise value/EBITDA ratios are thus the two metrics that may be used to examine the performance of Toyota Industries and its major competitors. It is also essential to do a cost-benefit analysis, considering both the positive

and negative outcomes. Furthermore, it is impossible to provide an estimate using either of these two multiple valuation methodologies without first identifying acceptable competitors.

Even for well-established companies, it may be difficult to find employees who are a good match for the company [4]. For instance, the business of delivering food is considered to be one of the most recent and rapidly expanding industries in recent years. It also fits within the category of e-commerce, which is a more general category. In light of this comparison with major players in the world of online shopping, such as Amazon and Alibaba, the results of this case might very well turn out very differently. Competitors of Toyota, such as Mitsubishi Heavy Industries Ltd., Panasonic Corporation, MISUMI Group Inc., Fanuc Corporation, and Daikin Industries Ltd., all of which are based in Japan, have a degree of competitiveness that is comparable to Toyota's.

2. Analysis on Toyota's Strategies

2.1 Overview of Toyota

Toyota is a Japanese multinational automotive manufacturer headquartered in Toyota, Aichi, Japan. It was founded by Kiichiro Toyoda and incorporated on August 28, 1937. In 2017, Toyota's corporate structure consisted of 364, 445 employees worldwide and, as of December 2019, was the tenth-largest company around the world in terms of revenue. Toyota is the global leader in the sales market of hybrid electric vehicles and one of the largest companies in the world that encourages the adoption of hybrid electric vehicles in the mass market. Toyota is a Japanese automobile company with major sales in Japan, North America and China. Toyota's products range from cars and steel to household goods and chemicals, but it focuses on hybrids and gasoline cars. Mercedes-benz, BMW and Audi are the natural enemies of brand power in China, but its premium Lexus brand is no match for the other three. Moreover, in areas where resources are relatively scarce, Toyota is better because it has neither an advantage nor a disadvantage, namely stability.

Toyota company earns revenue in two main ways. One is sale of automotives globally which amounts to about 90% of the company's earnings. The other 10% is earned from financial service operations which operates in over 30 countries globally. Using both approaches, the company has been able to dominate the target market despite the massive competition they face.

One of the company's strategies that have increased profits and enabled market domination is the ability to serve all types of people using factors such as quality, pricing, quantity, and even nature. This ensures that all their clients' needs are met at affordable prices and still maintains the high quality of their products.

2.2 Strategies of Toyota

The other strategy that Toyota applies is reducing the environmental impact and global footprint they have. This includes introducing new products using robotics and electrification of cars and the manufacturing process. The company is also redefining its structure and operations to increase effectiveness and reduce operating costs. These measures have helped increase sales and reduce costs, thus increasing the profit margin [5].

These two strategies have helped the company retain its market dominance and remain relevant, especially in ensuring they meet its clients' needs.

3. Analysis on Toyota's Main Competitors

Toyota is one of the largest automotive companies across the globe. However, the company operates in a highly competitive industry. As an international-based entity, the company has competitors from all over the world. Most of the competitors deal with automobiles that are only differentiated by factors such as, new and improved features, quality, pricing, fuel, and reliability which have shifted demand patterns. As a result, there are reduced Toyota unit sales per annum, unlike previously when Toyota dominated the market. Some of the company's main competitors are

Honda, Chrysler, Ford Motor Company, Volkswagen, and Chevrolet [6]. Due to high competition, Toyota's competitors, such as Chrysler and Ford, offer purchase discounts such as price reductions as an incentive to current Toyota customers. This approach boosts the competitors' sales and reduces Toyota's market domination. Another common approach Toyota's competitors uses is using catchy keywords that drive Toyota owners towards them.

One of Toyota's main competitors is Ford Motor, the second-largest automobile company in the world. Like Toyota, they have controlling interests in Mazda and operate a credit corporation. Therefore, apart from the brand and valuation, Toyota and Ford are very competitive [7]. Toyota is valued at about 272 billion dollars, while Ford is valued at 160 billion, placing Toyota in the first position [7]. Despite setbacks due to the covid-19 pandemic, Ford is enjoying a better financial position, evidenced by increased sales and liquid cash in the business. Ford's financial situation, including the stock value, is expected to improve considerably. However, the prediction of profits to be made has decreased from 4.85 million to 4.2 million due to the negative economic impact due to Covid-19 effects on the economy [8]. The second is Honda motor company, valued at 141 billion dollars, and deals with electric vehicles, vehicles, and self-driving automobiles, similar to Toyota's products. Honda also has gained profits of 211.0 billion yen which is attributed to lower operation costs, positive changes in currency exchange rates, and control over incentives which have given Honda a competitive edge. There is also an expected increase in profits this year. However, Toyota has remained on top of the competition since they have created a strong brand image with products to serve everyone based on design and affordability while maintaining high-quality products. This is an aspect most of its competitors have not been able to match, thus giving Toyota a better competitive edge.

4. Analysis on Toyota's financial indicators

The Toyota Valuation Module also provides a one-of-a-kind mechanism for determining how much a business is now worth by analyzing historical data. To accurately estimate the company's genuine value, it is important to conduct a quantitative analysis of the company's fundamentals. Then calculate the company's intrinsic value based on the current market price. In addition, it is important to take into consideration of Toyota's management style, as well as the expertise and tenure of its C-level subject-matter experts, its general leadership history, its present capital structure, and its potential for future earnings.

The Toyota corporation financial statements also provide a one-of-a-kind mechanism for determining how much a business is now worth by analyzing historical financial data. This helps to accurately estimate the company's financial values. This is captured in the company's financial reports in table 1.

Table 1. Financial indicators of Toyota

Income Statement	
Revenue (ttm)	31.38T
EBITDA	4.46T
Balance Sheet	
Current Ratio (mrq)	1.09
Cash Flow Statement	
Operating Cash Flow (ttm)	3.72T

Data source: Yahoo Finance

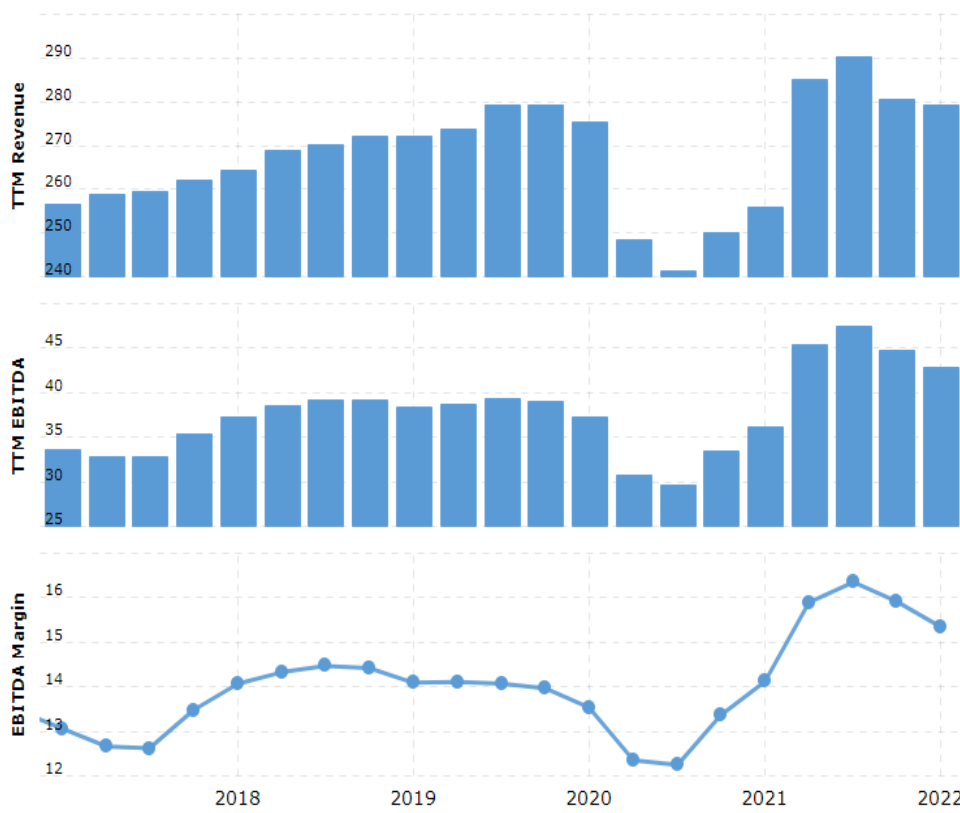
According to financial reports in table 2, it has an outstanding share count of 1.37 billion, a return on equity of 11.18%, and an operating margin of 9.55%. Because asset prices and their underlying values will ultimately converge on a single level, it is prudent to liquidate overvalued equities while simultaneously purchasing stocks that are now underpriced.

Table 2. Financial indicators of Toyota

Share Statistics	
Shares Outstanding	1.37B
Profitability	
Operating Margin (ttm)	9.55%
Management Effectiveness	
Return on Equity (ttm)	11.18%

Data source: Yahoo Finance

The Figure 1 shows Current and historical EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) margin for Toyota (TM) in the past five years. As of March 31, 2022, Toyota's current EBITDA margin is also shown in Figure 1.



Source: <https://www.macrotrends.net/stocks/charts/TM/toyota/ebitda-margin> (Accessed: 30 July 2022) [9]

Figure 1. EBITDA Margin of Toyota 2018-2022

5. Valuation of Toyota based on Multiples' Valuation method

5.1 Results based on PE method

The Price to Earnings ratio (P/E) compares the actual share value with market expectations. The stock value of Toyota is at \$157.15, which is a bit lower than the fair value of the automotive industry, which stands at \$163.75[10]. The value of the industry's price-to-earnings ratio currently ranges between 9.9 and 10.9, which is an average ratio of about 10.4. The P/E ratio for Toyota is at 10.2, which is lower than the average market by a margin of 0.2. For business in general, the average value is expected to be around 16 and 17, and due to market variations, that of the automotive industry is around 10. Thus, the Toyota ratio seems slightly cheaper since it falls below the average automotive value, and hence using the P/E ratio approach, Toyota's stock seems undervalued.

5.2 Results based on DCF method

The second approach uses the free cash flow, which uses the Discount Cash Flow (DCF). Toyota's free cash flow in 2022 stands at \$16.183 billion. This marks over a 160% increase from the previous year [2]. This indicates that the business is generating enough cash and creating a good margin to support the business. It also indicates that the business is currently doing well based on the automotive industry's standards [11]. Toyota's stock Discount Cash Flow (DCF) is 2256.92 jpy, while the current value is 2111. To determine if the business is overvalued or undervalued, the base value is used to assess the DCF value of Toyota.

The outcome shows that Toyota's value is lower than the base value, which is undervalued by 6%. The other ratio is the price to cash flow ratio of Toyota is 13.49, which is relatively high, but there is no industry value to compare this value to. This value compared to Honda is low since Honda has a ratio of 24.21, an increase from 23 in the previous years. However, this value is higher than Ford's price-to-cash flow ratio, which stands at 11.43 [12].

5.3 Results based on EV/EBIDTA method

The company's enterprise value is \$ 340415 million, and its EBITDA is \$ 51427 million. Therefore, its EV/EBIDTA ratio at Toyota at the end of the financial year that ended on March 31st this year stood at:

This is higher than the industry value, which stands at a ratio of 6.4. Another valuation is enterprise value to gross profit ratio, where Toyota's value is 4.8, which is lower than the industry value, which stands at a ratio of 6.0. Both the EV/EBIDTA and enterprise value to gross profit ratio indicate that despite Toyota being the highest valued. Toyota ranked first in the automotive industry is still valued lower than the average market stock value, which thus indicates that the company is healthy and above average. Still, the low ratio indicates that the stock may be undervalued. Such undervalued stock indicates that the business has more value than its market stock value, and as a result, the company is likely to be gaining profits and increase in value in the long term.

5.4 Discussion

In this case, the assessment of Toyota's stock valuations is compared to Honda, and Ford, which are the company's main competitors in terms of value, dealerships, and available data related to the operations and market demand [13]. Based on the multiple valuation assessment, Toyota's stock is seen as undervalued and thus good for long-term investments where investors can buy and hold, waiting for the stock to reach its fair value.

6. Conclusion

Under the background of COVID-19, the automobile industry has been affected to a certain extent. This paper evaluates the enterprise value and stock value of Toyota and its main competitors through the multiple valuation method.

First of all, using the P/E ratio method, considering the sustainable profitability of the enterprise, we conclude that Toyota's P/E ratio seems to be slightly lower and Toyota stock may be undervalued; The second is based on the DCF method, the benchmark value is higher than the value of Toyota Motor; Third, the results based on EV/EBIDTA method show that Toyota's value is higher than the industry value, but the stock value is lower than the average market stock value.

Stock valuation is of great significance to investors. It can help investors make relatively correct investment decisions, avoid unknown risks, and buy in time to obtain economic benefits. At the same time, the valuation has a great impact on the long-term development of the enterprise and is closely related to the sustainable profitability of the enterprise. According to the multiple valuation method, this paper concludes that the value of Toyota stock is undervalued, this aspect is attractive to investors since it indicates that the company is a low risk and stands to gain a lot of profits over time. Thus, increasing investments for the company and also increasing its share value.

Meanwhile, when compared to other companies in its sector, Toyota Motor Corporation presently has the best price-to-sales ratio, earning it the title of top stock in its business. It is now regarded as the best stock in the beta category among companies that have a total of around 65, 000 beta in relation to their sales price.

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