

Ferrari Analysis Based on Multiples Valuation Method

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Abstract. In recent years, with the development of World multi-polarization and the impact of the COVID-19 epidemic on the economy, Economic Globalization and Trade Protectionism parallel. In this case, a world-famous cars manufacturing company, Ferrari, which provides luxury sports cars and racing cars, is facing a tough situation with the instability of its share price. Thus, an accurate evaluation of Ferrari's value appears essential. Based on this, this paper uses the multiples valuation method to evaluate Ferrari Company and will show whether Ferrari is under-valued, over-valued, or fair. And the authors choose several peer-comparable companies of the same type to provide an informative reference point, which can help to determine its value situation more accurately, and focus on P/E ratio and EV/EBITDA, then verify its actual valuation. The investigation shows that investors overvalued the share price of Ferrari and creditors overvalued the EV of Ferrari at the same time. At the end of the paper, some preliminary suggestions about Ferrari's sustainable development are given. The methods used are conducive to evaluating Ferrari's value more accurately, and the showed results can help investors and investigators get more exact information about Ferrari's current situation and future prospects to make more reasonable investment decisions.

Keywords: Ferrari; Multiples valuation; COVID-19 effects.

1. Introduction

1.1 Background

Fierce industry competition has accompanied the impact of covid-19 on the market, making the automotive industry unprofitable. As a result, the automotive business is no longer a major part of the attractive financing environment for dealerships. This additionally applies to ultra-luxurious. The automobile enterprise, with customers specializing in low-quantity enterprise models, answers clients and brands. So, make investments inside the automobile industry contemporary fame investments that constitute destiny returns. However, the doubts inside the hearts of traders have mainly been associated with the destiny of overall performance. This elite emblem of a mature, low-profit, low-capital-extensive enterprise like an automobile. Questions of uncertainty additionally relate to how low-quantity, high-quit customers will live on amongst industrially produced high-quit gamers who take benefit of widespread economies of scale to persist in an aggressive environment [1]. And the effect of the epidemic on the whole automobile industry in recent years. To that point, the aggregate of investor skepticism and Ferrari's specialty amongst automakers makes the subject of organization valuation academically very illuminating.

1.2 Related Research

“Financial Valuation of Ferrari S.p.A” written by Bosko Kovacevic and “The Equity Valuation of Ferrari NV” written by Fabio Giacomo Müller, each research was published in 2016 and 2017, in particular, they have similar purposes and strategies with us. In Fabio Giacomo Müller’s work, his primary goal was the estimation of the fair value of Ferrari NV. He mentioned that P/E multiple is a good indicator of stock value, it is one of the most commonly used key ratios in the financial world. Therefore, it is used, among other things, in this work to estimate the value of Ferrari's equity. An

EV/EBITDA multiple is also a good way to get an accurate enterprise value. From the research, in 2016, Ferrari's stock was undervalued by 13.3% compared to the market's average [2].

1.3 Objection

The study aims to determine Ferrari's fair value and how value factors affect the company's future operating prospects. The results of this paper can also serve as a reference for analysts to evaluate other companies that were used as competitors of Ferrari. Automotive and other industries. Similarly, the uncertainty problem refers to small mass production and high-end manufacturers will survive thanks to the mass production bounty players who benefit from significant economies of scale to compete for surroundings. This thesis proceeds to an in-depth analysis of the valuation of Ferrari.

In order to achieve the goal of the research, firstly, the authors analyzed and summarized Ferrari's operational strategy, so that they could have a better understanding of its main operation and sales model. Then, the authors found several competitors of Ferrari, such as Porsche, Volkswagen, General Motors, Mercedes-Benz, BMW, Ford and Stellantis. Then compare their EV, revenue, profit margin and other data, then using the P/E ratio and EV/EBITDA multiple to judge whether Ferrari is overvalued, fair, or undervalued by the market and creditors.

2. Basic Descriptions of Ferrari

Ferrari is a world-famous cars manufacturing company, based in Maranello, Italy, providing luxury sports cars and racing cars. It is founded in 1947 by Enzo Ferrari, and mainly manufactures high-performance sports cars and F1 racing cars. In 2019, Ferrari sold more than 10000 cars worldwide, setting a new annual sales record [3]. According to Companies' Market Cap, up to 2021, Ferrari had been the 10th largest automobile manufacturer by market value [4]. Due to the COVID-19 pandemic making people realize that they should enjoy themselves in time, and simultaneously a bill passed by the EU aiming to completely ban the sale of fuel vehicles by 2035, the demand for luxury cars is constantly increasing, which brings Ferrari both revenue and profit of Ferrari rising to record levels in the second quarter in 2022.

Nonetheless, in fact, Ferrari has been in a series of unstable changes up to date, since it stood alone on its own from FIAT, owing to the replacement of CEO and the transition to SUV models and electric vehicles with the aim to realize the carbon neutralization and cut down the carbon footprint catering the demand for sustainable development strategy. What is more, for the sake of protecting its brand value, Ferrari had been limiting its car production in the past. However, these days, in order to open its market and improve its brand's value, it is also devoted to expanding its business field by providing more high-end derivatives bearing the Ferrari brands, including clothing, shoes, watches, perfume and so on. In this case, many of these lead to an identity crisis for Ferrari, also causing the volatility of its share price, contrary to its expectation of entering the luxury industry [5].

Based on the above problems, it is particularly necessary to carry out research and analysis on the relevant contents of Ferrari. Based on the purpose of analyzing and measuring the fair valuation of Ferrari's shares and providing related information to help investors and management to improve invest-analyzing and strategy decision-making, in this paper, Multiple Valuations methods are used to analyze the current situation that Ferrari is in, including both its own profitability and opportunities and comparison with its competitors, and thus some suggestions and inspirations come up accordingly, which can make a reference for value-based management of a company.

3. Operational Strategy Analysis

From Ferrari's view, it became vital that they persevered to spend money on education for their workers, take care of their health and price the super variety of expertise in their company. Also, the company invested heavily in research and development, Ferrari believes that outsourcing is not a good way to make sure the efficiency and flexibility of the production process. Therefore, Ferrari

maintains to make investments withinside the competencies and strategies required for low-extent manufacturing of additives that Ferrari accepts as true with enhanced product quality. The cash flows used in investing activities have increased.

In today's society, high-performance sports cars have become a kind of entertainment and occupation in people's lives, and the good performance of Ferrari cars has brought them good market prospects. But Ferrari is extremely demanding of its customers. They review customer records to determine if they are eligible to purchase a Ferrari and set a variety of regulations such as: for example, not performing speed tests without permission, changing the look of a car, and even buying a competing Ferrari brand. Furthermore, to ensure product quality, most Ferrari cars are made entirely by hand, which keeps the number of Ferrari cars very small and usually takes long delivery times. As a result, not everyone is eligible to buy Ferrari cars, but it also increases people's desire to buy them.

Developing and advanced countries: The corporation employs a low-extent manufacturing method which lets in it to preserve exclusivity, at the same time as additionally retaining with converting customer dynamics in addition to socio-financial changes. The corporation has been capable of living in advance of the curve for the majority of these years, way to its steady launch of the latest fashions and enhancements.

(1) Formula 1 racing: Scuderia Ferrari has been a pacesetter in Formula 1 racing and is thought for its fulfillment in Formula 1 racing.

(2) Expansion of luxurious and lifestyle products: The corporation works collectively to create a number of luxurious items and lifestyle class that offers clients the sensation of exclusivity. This is achieved with the aid of using supplementing the present sports activities vehicles and thereby improving the brand's image.

Ferrari's sales especially come from 3 businesses, particularly cars and elements, engines and sponsorship, and industrial and logo businesses. The car and elements enterprise is the company's largest sales contributor, with sales of 881 million Euros withinside the second quarter, mainly due to the company's rich product range and personalized promotion of sales growth, sales volume was lower in the second quarter of last year. Ferrari's sales were €1035 billion in the second quarter of 2021, up 81% from €571 million in the second quarter of 2020. Revenue for the half year was €2046 billion, up 36% year over year, thanks to increased vehicle deliveries [3,6]. That is because, in the second quarter of 2020, global production of automobiles and auto parts stagnated from April to June due to the impact of the COVID-19 pandemic. Since the fourth quarter of 2020, Ferrari deliveries have gradually returned to pre-pandemic levels as the negative impact of the pandemic has abated.

Unlike some internet companies, the auto industry has been hit hard during the pandemic, bringing both opportunities and challenges. With the short-term end of the epidemic, Ferrari productivity increased dramatically and sales of V12-powered vehicles increased accordingly, and more diversified products were manufactured. Therefore, the profitability and future prospects for Ferrari are very optimistic.

4. Multiples Valuation

4.1 Methods

The multiples valuation of Ferrari would focus on P/E ratio and EV/EBITDA. These two ratios can reflect the equity situation and firm situation, respectively. The overall process of multiples valuation is that 1) choose suitable peer groups of Ferrari; 2) take the median value of the multiples to avoid outliers; 3) multiply Ferrari's EPS (earnings per share) and EBITDA (earnings before interest, tax, depreciation and amortization) to the median multiples; 4) compare the result with Ferrari's actual share price and EV (enterprise value) to determine whether Ferrari is overvalued, undervalued or fair.

Due to Ferrari's special strategies, sports cars and racing cars, it is hard for Ferrari to find a suitable competitor to compare. In this case, similar targeting consumer groups and products become the only two measurements of choosing the peer group of Ferrari. Since there are many well-known luxury sports car brands under Volkswagen, BMW and other large automobile manufacturing companies,

some of these brands are not individual firms that do not have individual financial statements for comparison. Thus, the peer group for the multiples valuation would include the parent corporations of these brands. Furthermore, the valuation would repeat one more time with the only suitable competitor, Porsche, which has a similar strategy but a smaller size compared to Ferrari as another peer group individually. Therefore, the valuation would repeat twice within the same ratio, firstly comparing with Porsche and secondly comparing with these large enterprises owning luxury sports car brands.

4.2 Competitors Analysis

Table 1. Key Statistics of Ferrari and its competitors (Data source: Yahoo Finance) [7-14]

	Ferrari	Porsche	GM	Volkswagen	Benz	BMW	Ford	Stellantis
Market cap (in Billion USD)	37.692	18.443	56.984	93.592	69.272	57.828	56.407	48.329
EV (in Billion USD)	41.16	17.67	139.28	213.67	130.85	121.58	145.84	26.95

Porsche is chosen as the main competitor of Ferrari and is selected to compare with Ferrari individually because Porsche is the only car manufacturing firm that performs significantly in luxury sports cars and Formula 1, which is the most legendary strategy of Ferrari. Even though Porsche has a smaller size compared to Ferrari, having only a half market cap and EV of Ferrari (Table 1), Porsche is the most suitable firm that has the greatest degree of similarities to Ferrari. Due to the size difference between Porsche and Ferrari, another peer group including large car manufacturing corporations is necessary to avoid valuation errors.

The peer group of large car manufacturing firms includes Volkswagen, General Motors, Mercedes-Benz, BMW, Ford Motor and Stellantis. These six companies are all greater in size compared to Ferrari, almost all the amount of market cap and EV in these enterprises are greater than that of Ferrari (Table 1), but they own some luxury sports car brands. For example, Lamborghini, the greatest brand competitor of Ferrari, is under Volkswagen; General Motors owns Chevrolet, a famous sports car brand; Mercedes-Benz has Maybach, which is a notable sports car brand; Bentley is a prominent luxury sports car brand, belonged to BMW; Ford of Ford Motor produces sports cars; and Stellantis manages Maserati and Alfa Romeo, well-known sports cars. Even though all of these brands are competitors of Ferrari, they cannot directly compare with Ferrari. However, using their parent companies as Ferrari's peer group could still show the financial value of Ferrari since the value created by these brands is included in their parent corporations' financial statements.

4.3 Calculation

4.3.1 P/E Ratio Comparison with Porsche and Large Enterprises

Table 2. P/E Ratio of Ferrari and its competitors (Data source: Yahoo Finance) [7-14]

	Ferrari	Porsche	GM	Volkswagen	Benz	BMW	Ford	Stellantis
P/E	41.05	3.45	6.82	5.52	5.11	3.08	6.25	2.97

Since $P/E \text{ ratio} = \text{Share Price} / \text{Earnings Per Share}$, the share price of Ferrari based on Porsche's $P/E \text{ ratio} = \text{Ferrari's EPS} \times \text{Porsche's } P/E = \$5.21 \times 3.45 = \$17.97$.

Similarly, with the peer group of large firms' $P/E \text{ ratio} = (5.11 + 5.52) / 2 = 5.315$, the share price of Ferrari based on the peer group of large firms' $P/E \text{ ratio} = \text{Ferrari's EPS} \times \text{Peer Group's Median } P/E = \$5.21 \times 5.315 = \$27.69$.

Ferrari's actual share price is \$217.59, much greater than the share price based on Porsche and the peer group of large firms, which means that Ferrari is overvalued by the market.

4.3.2 EV/EBITDA Comparison with Porsche and Large Enterprises

Table 3. EV/EBITDA of Ferrari and its competitors (Data source: Yahoo Finance) [7-14]

	Ferrari	Porsche	GM	Volkswagen	Benz	BMW	Ford	Stellantis
EV/EBITDA	23.50	3.44	5.89	4.22	5.06	5.71	7.39	1.11

For valuation on EV/EBITDA multiple, the process is the same as the P/E multiple. Since $EV/EBITDA = \text{Enterprise Value} / \text{Earnings Before Interest, Tax, Depreciation and Amortization}$, the enterprise value of Ferrari based on Porsche's $EV/EBITDA = \text{Ferrari's EBITDA} \times \text{Porsche's } EV/EBITDA = \$1.43 \text{ billion} \times 3.44 = \4.92 billion .

Similarly, with the peer group of large firms' $EV/EBITDA \text{ ratio} = (5.06 + 5.71) / 2 = 5.385$, the enterprise value of Ferrari based on the peer group of large firms' $EV/EBITDA \text{ ratio} = \text{Ferrari's EBITDA} \times \text{Peer Group's Median } EV/EBITDA = \$1.43 \text{ billion} \times 5.385 = \7.70 billion .

Ferrari's actual enterprise value is \$41.16 billion, which is much greater than the enterprise value based on Porsche and the peer group of large firms, showing that Ferrari is overvalued by creditors.

4.4 Discussion

The result of this multiples valuation is that investors overvalued the share price of Ferrari because they have a higher expectation of Ferrari. At the same time, creditors overvalued the EV of Ferrari, showing there is a higher purchasing price of Ferrari. The restriction of this valuation is that Ferrari does not have any substitute due to its special competitive advantage, such as Formula 1 racing. Therefore, the calculations involve two comparisons with firms of different sizes in the same ratio to avoid errors. From this valuation, it is reasonable to justify that Ferrari is much more expensive compared to the whole luxury car industry, but Ferrari is too special in its strategy to define its true value in its own area.

5. Suggestions

As the result shows, Ferrari is facing a key period of development.

In this case, aiming to pave the way for Ferrari's better development, some suggestions are offered as follows:

(i) Since brand exclusivity is the most feature of Ferrari, Ferrari should invest more funds to improve its irreplaceability by upgrading its own product performance and ensuring its position in F1. What is more, Ferrari can develop more derivative businesses, like its luxury derivatives to regain the confidence of investors.

(ii) With the strengthening of environmental protection trends in modern society, Ferrari should reduce carbon emissions and manufacture hybrid electric vehicles and full electric vehicles to cater to the times demand confronting the increasingly serious environmental problems, especially air pollution to realize carbon neutralization.

(iii) Encourage the innovation to elevate their car technology to meet the challenges of competitors and develop its own advantages that combine revolutionary technological solutions with exceptional artisanal craftsmanship.

(iv) Establish a positive labor relation by some strategies like offering a good reward to employees who perform excellently in helping the enterprise to respond to the challenges of times and markets. And develop a cooperative environment that can stimulate employees' enthusiasm for work and innovation and let each employee gives play to their best value.

(v) Improve management efficiency and formulate a forward-looking enterprise development strategy, which is a necessary condition for Ferrari's long-term and effective development.

(vi) Take social responsibility and make contributions to the public, bring value to society, and offer financial support during the COVID-19 pandemic to establish a positive brand image winning public recognition. Continue to inherit and develop Ferrari spirit to establish a good corporate image.

(vii) Maintain the relationships and contact between Ferrari and Ferrari's enthusiasts and customers including potential customers, which can keep and enlarge its markets. And they can expand their sales scale by setting up a good dealer network.

In view of the above, we can draw inspiration from it:

Enterprises should take some measures such as controlling the growth of production to preserve and enhance the value of the brand and re-position their brand in the market to avoid a further decline of brand value when confronting a dilemma, especially in a serious epidemic situation like now. And they should not give up long-term development for the sake of immediate interests such as just expanding sales without elevating the equality of products or cheap sale for current profits.

Although COVID-19 is still prevalent around the world, the desire for luxury has not too much reduction. On the contrary, even some people especially the rich are more willing to consume luxury, aiming to avoid the impact of possible currency devaluation. However, instead of letting the output grow exponentially to cover the deficit, Ferrari chose to preserve its brand exclusivity as it used to. Ferrari is always maintaining its tradition and developing its renewal at the same time, and it is devoted to realizing the achievement of carbon neutrality by 2030 [15].

Thus, Ferrari will still maintain its market position as one of the main luxury sports cars and F1 racing car manufacturers.

6. Conclusion

As shown above, this paper uses multiple valuation methods to estimate Ferrari's value by conducting the valuation twice, respectively comparing it with Porsche individually and a group of large enterprises owning luxury sports car brands including Volkswagen, GM, Benz, BMW, Ford and Stellantis, with a focus on P/E ratio and EV/EBITDA. and found that it is over-valued by both investors and creditors. This is caused by the markets' too-high expectations of Ferrari, and Ferrari's own always high brand value.

As it shows, Ferrari is in a critical period of its development with uncertainties in all aspects, from the impact of the continued COVID-19 pandemic to the fierce competition with its competitors. Some brief advice on various aspects is given at the end of the article, from the brand's manufacturing technology to the company's social responsibility. And this paper also gets some inspiration about enterprise development from it.

However, due to the limitation of the authors' own capacity and incomplete financial data, this paper does not make too deep an investigation and only gives some plain suggestions.

In general, since Ferrari has been putting its own exclusive strategy into practice, encouraging employees' innovation and inheriting Ferrari's spirit, Ferrari will maintain its market position as one of the main luxury sports cars and F1 racing cars manufacturers and realize its carbon neutrality goal one day.

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