Equity Valuation of Ferrari under Multiple Valuations

Yihan Wang[1, *]

[1]Honors College, Tianjin Foreign Studies University, Tianjin, 300000, China

*Corresponding author: 16011010225@stu.suse.edu.cn

Abstract. This paper aims at determining the stock price of Ferrari, which is a leading company in the luxury performance car industry, to evaluate if it's overpriced or not and discuss the potential limitations of the valuation method. The valuation is based on multiple valuations. The target share price of Ferrari is calculated using the average P/E ratio after identifying Ferrari's comparable peer group. The paper calculates a share price of $91.98, which is significantly less than its current share price of $196.90, based on the P/E ratio valuation. The outcome suggests that Ferrari was expensive. Ferrari's dominant position within the industry as a whole and the inherent flaws in the valuation mechanism is the key factors influencing this. To have a better understanding of the company itself, more models, such as discounted cash flow valuation, are advised. P/E ratio valuation can be employed as an initial screening technique. This essay offers some insights into Ferrari and the entire high-performance automobile market, which can be helpful when calculating the share prices of top firms like Ferrari.

Keywords: Ferrari; Luxury Performance Car Industry; Equity Valuation; P/E ratio; Multiple Valuation.

1. Introduction

1.1 Research Background

The market for luxury performance cars recovered in a V shape in 2021. based on Ferrari's most recent annual report. When compared to the shipments of the entire luxury performance car industry, which have marginally recovered but remain below the pre-pandemic level for 2019, it can be seen that their volume has increased and returned to its pre-pandemic levels in 2019. COVID-19 has caused a period of economic stagnation worldwide. Ferrari and some of its rivals were forced to emerge from the recession and restore their manufacturing capacity as a result of the process of containing the epidemic, which included widespread vaccination efforts. Additionally, certain updated goods were introduced in the same period, which helped the industry recover.

1.2 Research Significance

Ferrari has always been maintaining its leading position in the industry. Through the valuation of Ferrari, it can offer a clearer view of the company as well as the whole industry. The valuation is relevant for both its shareholders and its stakeholders interacting with it. The valuation result can be a key criterion for the management to make decisions and set strategies for the future. This can help to allocate the limited capital resources to the more significant area to forge a win-win relationship both inside and outside the company.

1.3 Paper Organization

In the second chapter, a literature review is developed to introduce different types of multiples and the meaning of peer groups in the valuation process. In the first step, the two most used multiples will be presented. Afterward, in the third chapter, the paper gives a brief introduction of the historical overview of Ferrari. The overall financial performance of Ferrari will also be presented in this chapter. It presents some potential risks and opportunities that the company may face. Subsequently, a detailed strategic analysis of the whole luxury performance car industry in which Ferrari plays will be given. In order to identify its share price, a comparable peer group is selected. Then based on the financial data obtained on Morningstar, the paper presents the whole valuation process based on P/E ratio valuation. Finally, based on the result, the paper discusses some potential deficiencies of the valuation model and gives some suggestions on the selection of the valuation models.

2. Literature Review

Since it is the essential strategy for allocating resources and making investment decisions, the valuation technique has grown more alluring over the past few years. Executives in both the financial and non-financial sectors are interested in valuation since it serves as a foundation for choices about ongoing operations, ownership claims, and business potential [1]. It is crucial to realize that worth and price are not equivalent because a valuation can be performed from a variety of viewpoints, including that of the buyer and seller, which differ greatly [2]. Researchers and academics advise employing various valuation techniques to compare the market valuations of the target company since "different techniques can lead to quite different values" [3].

The simplest valuation method, multiple values, will be briefly introduced in this chapter, and its suitability for creating a fair value for Ferrari NV will be assessed.

2.1 Multiples

As the value is generated from the market momentum of comparable companies, multiple valuations are more of an estimate of the worth at the current market conditions than a strategy to determine the intrinsic value of a company [4]. In some ways, it serves as a representation of the price that investors are willing to pay [3]. Due to its ease of use, the method is frequently employed as a supportive valuation alongside a fundamental valuation approach to test and challenge the basic estimation's presumptions [5, 6]. Using multiple valuation approaches to cross-check values and better understand the important aspects of the valued firm and its competitors became the state of the art [3, 7]. Consequently, a carefully picked set of comparable organizations is essential for a reliable value calculation [8]. Furthermore, it has been demonstrated that prospective multiples outperform both leading and trailing multiples in terms of valuation accuracy. Additionally, it is challenging to apply multiple valuations across various nations and businesses due to diverse accounting rules and economics.

2.1.1 Equity Value Multiples

Due to their simplicity, data availability, and ease of communication, equity value multiples, also known as earnings multiples, are commonly employed [9]. The P/E ratio is the most popular earnings multiple since it closely reflects a company's current market worth. The formula below can be used to compute it.

$$P/E\ Ratio = \frac{Market\ Price\ per\ Share}{Earnings\ per\ Share} \tag{1}$$

However, the multiple has a number of drawbacks and is heavily influenced by a company's leverage ratio. As a result, it doesn't just concentrate on operating profit, which more closely approximates capital value. The P/E multiple's second flaw is that non-recurring items in profit and loss can be used to readily manipulate it as an accounting metric [5].

The P/E ratio is one of the most common financial ratios in the financial industry and is quite straightforward. It can therefore be utilized as a screening procedure in the initial stage because it is more acceptable. As a result, it is applied in this essay to calculate Ferrari's equity value.

2.1.2 Enterprise Value Multiples

The enterprise multiples depict a company's market worth in relation to another type of value, such as EBITDA or EBIT [10]. When using the method to compare a group of companies with various capital structures, some academics advocate adopting enterprise multiples over earnings multiples since they are less susceptible to the degree of leverage of their peers [5][9]. It can be calculated as the formula below.

$$EV/EBITDA = \frac{MV\ Equity + MV\ Debt - Cash}{EBITDA} \tag{2}$$

It is advised to adjust the calculated value for surplus cash, other non-operating assets, operational leases, and pensions in order to determine an accurate enterprise value using this multiple.

The enterprise value multiples and earnings multiples both have advantages and drawbacks of their own. Therefore, it is crucial to compare the values produced from equity multiples and enterprise multiples in the actual world in order to balance out the drawbacks of both methodologies [10].

2.2 Peer Group

There may be significant disparities between industries, thus comparing the business simply to those in its own sector could be deceptive [10]. To locate the appropriate comparable organizations, it is therefore more logical to choose a set of businesses that are similar in terms of business risk, growth rates, returns on invested capital, and leverage level [2, 6, 11]. The peer group should be chosen, in accordance with prior research, by carefully examining the company's return on invested capital and growth projections [5, 6, 9].

3. Company Overview

In this chapter, there are introductions regarding the history of Ferrari, what makes it popular, and how successful it is as a Formula 1 racing team as well as a well-renowned company. Analysis of Ferrari’s financial performance will also be presented in this chapter, focusing on its shipments and research and development expenditure.

3.1 History of Ferrari

One of the top premium brands in the world, Ferrari focuses on creating recognized luxury sports cars through design, engineering, manufacturing, and marketing. They are also committed to the advancement of sports vehicle components and the incorporation of new technologies. Ferrari stands for superiority, exclusivity, creativity, cutting-edge athleticism, and Italian design and engineering tradition.

Enzo Ferrari, who founded Ferrari and was one of the most renowned race car drivers in the world, was born in Modena, Italy, in 1898. To compete in Alfa Romeo car races, Enzo Ferrari established his racing team, Scuderia Ferrari, in 1929. He founded his own business in 1939, and Ferrari unveiled the 125 S, its first racing vehicle, in 1947. Ferrari started competing in the Formula 1 World Championship in 1950, and today, with more than 5,000 victories, Ferrari is the most well-known racing team. Additionally, it builds its brand image and generates income using its global reputation.

3.2 Financial Overview

In this chapter, this paper identified some highlights as well as potential risks based on Ferrari’s historical financial performance. Firstly, this paper presented some key financial ratios of Ferrari. All data available are collected on Morningstar.

Table 1. Key Financial Ratios of Ferrari

Overall	
Market Cap	$39.4323 Billion
Industry	Auto Manufacturers
Valuation	
Price/Book	16.95
Price/Cash Flow	28.99
Price/Sales	8.20
Price/Earnings	42.55
Profitability	
ROA	13.49%
ROE	43.53%
Invested Capital	20.07%
Net Profit Margin	19.29%
Growth Rate (3-Year Annualized)	
Revenue	7.68%
Operating Income	9.11%
Net Income	1.92%
Diluted EPS	2.82%
Financial Health	
Quick Ratio	2.72
Current Ratio	3.52
Interest Coverage	18.94
Debt/Equity	1.22

The table 1 mainly presents the profitability, liquidity, and some key ratios regarding business valuation, which can offer a general overview of its financial performance, financial position, and capital structure.

3.2.1 Shipments

Ferrari's revenue is heavily reliant on the sales of its expensive vehicles. Ferrari's ability to reach its sales goals hinges on whether the shipment goal set forth in its corporate plans and budgets will be accomplished. Ferrari decided to pursue controlled growth and maintain brand uniqueness by adopting a low volume approach. In order to respond best to relative levels of demand while being mindful of local client expectations in specific regions, Ferrari administers waiting lists in the various markets in which they operate. Waiting lists may enhance the perception of product exclusivity in some markets. This tactic can assist in keeping it exclusive while ensuring that customer pleasure is not compromised.

In order to maintain the brand's exclusivity among Ferrari buyers, they have continued their low volume strategy while adapting to demographic shifts as their target market has grown in size and purchasing power. As a result, annual shipments have gradually increased from 10,131 in 2019 to 11,155 in 2021, despite a decline to 9,119 in 2020 due to the COVID-19 pandemic, resulting in an average annual shipment of 10,135 over the past three years.

3.2.2 Research and Development Expense

Ferrari conducts research and development initiatives to enhance the appearance, functionality, cutting-edge technology, safety, effectiveness, and dependability of the goods. The research phase is the initial step in the development of a product. In this stage, the businesses will look into the technical details of new models they think would appeal to customers and be profitable. According to IAS 38 - Intangible Assets, costs are only recognized as an asset if and only if both of the following conditions are satisfied: The technical viability of the product, projected quantities, and anticipated price all support the idea that the development expense would result in future economic rewards. First, development expenditures can be measured with accuracy. All other expenses for research and development are charged as they are incurred.

The decision to more fully incorporate recently introduced powertrain technologies (including hybrid and electric) into our product portfolio has recently had an impact on the level of capitalized development expenditures, as has the timing of product updates and range renewals. Ferrari introduced 13 new models between 2019 and 2021 as part of its plan to introduce 15 new models by 2022, which was first revealed at the 2018 Capital Markets Day. This was done to maintain the company's position as the market leader and to react quickly to consumer demand and technological advancements.

4. Industry Overview

4.1 Luxury Performance Car Industry

Ferrari chose two-door, engine-powered automobiles as their target market for luxury vehicles. Luxury car growth trends, to a certain extent, are similar to those of the larger luxury market. Although some manufacturers have shown to be relatively elastic and resilient, the luxury car market is heavily dependent on general macroeconomic conditions. Given the arbitrary nature of luxury market consumption customs, general recessions can have an unavoidable impact on the sales of luxury goods. The expectations of future benefits and the social acceptance of luxury might also have an impact on the volume of sales due to the erratic consumption psychology.

The luxury performance automobile industry has demonstrated some resiliency in the face of economic stagnation following the abrupt collapse of the global macroeconomy in 2008–2009. As a result, more and more new products are being introduced at this time. The population of prospective customers of luxury products has increased as a result of the consistent rise of the economies in Asia and other parts of the world. As a result, a revolution in luxury vehicles that are more suited for urban, daily use is taking place as a result of changes in consumer demographics. Additionally, the increased demand for luxury cars among wealthy consumers of a younger generation has brought new competitors to the market, increasing overall sales.

4.2 Competitors

Large automakers with premium brands and other producers who only make luxury cars are among Ferrari's key rivals in the market for high-performance luxury cars. Sports cars and GT cars are included in the luxury performance automobile market.

The 812 GTS, Ferrari F8 Tributo, Ferrari F8 Spider, 296 GTB, SF90 Stradale, and SF90 Spider are some of Ferrari's current sports car models. Lamborghini, McLaren, Porsche, Mercedes, Aston Martin, and Audi are their main rivals. The Ferrari Roma and Ferrari Portofino M are Ferrari's current GT models, and Rolls-Royce, Bentley, Aston Martin, and Mercedes are their primary rivals.

The main factors in the luxury automotive sector are the brand itself, the attraction of the products in terms of look, performance, novelty, and invention, as well as the manufacturers' capacity to stimulate consumer demand. Competition between similarly positioned luxury performance cars is influenced by price and total ownership expenses. Value retention over time is an important component of the competition. Increased maintenance lowers the total cost of ownership, which promotes more frequent purchases.

5. Valuation

The appraisal of this work will take place on September 20, 2022, and at this time, the stock market and financial statements have provided all pertinent financial information. The valuation based on a chosen peer group will be shown in the paragraphs that follow. The peer firms' financial information was collected from Morningstar as of September 20, 2022.

5.1 Selecting Peer Group

According to the previous chapter, Ferrari is not the only player in the luxury performance car field. It's not the only manufacturer in the industry. Due to its distinct product segments, it's quite hard to select a reliable peer group. But as described in the "Competitors" chapter, this paper identified some of its main competitors as its peer group. The peer group includes Porsche, Mercedes, Audi, BMW, and Aston Martin.

Table 2 peer group

Data obtained on 20 September 2022						
Variable	Ferrari	Porsche	Mercedes	Audi	BMW	Aston Martin
Market Cap (US dollars in Bil)	36	21	62	69	48	2
Share Price (Denominated in US dollars)	$197	$7	$58	—	$72	$5
EPS (TTM) (Denominated in US dollars)	$5	$2	$20	$46	$27	$1
P/E ratio	40	4	6	35	3	-
EV/EBITDA	22	4	5	7	4	90

5.2 Multiple Valuation

The Price-to-Earnings (P/E) ratio was taken from Morningstar on 20th September 2022. Due to the market cap of the peer group being variable, the average P/E ratio of the peer group is a weighted average based on the market cap. Competitors' average P/E ratio is 18.55 in 2022. Then, when applying this average P/E ratio to the earning per share (EPS) of Ferrari, it will present us with the share value of Ferrari under the Price-to-Earnings Ratio Valuation of $91.81, which is way much lower than the current share price of $196.90. The result shows that Ferrari is overpriced.

6. Evaluation of Valuation Results

From the result, it can be told that Ferrari is overpriced. The results seem that Ferrari has a low possibility for the potential development of its stock price. It is mainly affected by the current situation, that Ferrari has very few comparable companies in the luxury sports car industry. As in the whole industry, Ferrari has maintained its leading position and the luxury sports car market is relatively saturated. Besides, there are also some problems with the multiple valuation methods based on the P/E ratio. The corporation cannot utilize its P/E ratio because of the market's assumed inefficiency; instead, it must use the P/E ratios of other companies. Second, the P/E ratios may not account for the company's potential future growth or the effects of the takeover on its performance because they are based on past performance. Third, this method of valuation is rather straightforward and has wide margins of error.

7. Conclusion

This thesis aims at determining the target share price of Ferrari. The Multiple Valuation, namely the Price to Earning Ratio Valuation which is both understandable and reliable is used to this end. Throughout the thesis, the luxury market, and more specifically, the luxury performance car market is analyzed, so as to evaluate the competitive factors and potential opportunities faced by Ferrari. Then the peer group is selected based on the comparable companies. The P/E ratio used should be representative of the average of numerous comparable companies for the initial risk to the business. In order to share the same beta, the peer group should perform in the same industry. The second factor is financial risk. The peer group should have roughly the same amount of gearing, indicating that these businesses are at roughly the same level of financial risk. the third, expansion. To make the peer group more comparable and to produce a more trustworthy conclusion, it should expand at roughly the same rate.

Furthermore, there's more work that can be done. For example, Ferrari's historical performance can be evaluated deeply to make it a basement to make assumptions regarding its future financial performance. This will be helpful when using the Discounted Cash Flow Valuation. Differences between different valuation methods are also worth studying.

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