

Research on the Investment Value of Disney Based on Multiples Valuation

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Abstract. This paper aims to estimate whether Disney's stock price and enterprise value is over-valued or under-valued by using the multiples valuation method from the aspect of corporate finance and stock market combing with the financial analysis of Disney, strategy introduction, and competitor analysis. The main findings of this paper include that Disney's stock price and enterprise value are fair. Based on these findings, the paper gives some explanations to illustrate this outcome: the first is of Disney's prestigious films and characters. And the second is because Disney's competitors in different have different statue in their own field, which might influence the calculation and outcome. And lastly is the most important, is since people love Disney which bring people imagination, fantasy and happiness. The value of this paper is that the findings can not only help the public learn more about Disney's development situation but also offer the public another perspective and general method to analyze companies' value and stock price.

Keywords: DISNEY; Multiples valuation; Enterprise value; Stock price; P/E ratio.

1. Introduction

In this day and age, a large group of people live and work in peace and contentment. Most people no longer have to worry about having a good meal or personal safety concerns (physiological need and safety need in Maslow's hierarchy of needs), and their attention is gradually shifted to their spiritual needs (the remaining needs in Maslow's hierarchy of needs, such as Cognitive needs and Aesthetic needs), which is popularly known as the entertainment sector. It has promoted the rapid development of related industries (such as paradise—Universal Studios, Film & Television—Warner, etc.), which undoubtedly includes the Disney Group, which later became almost a household name. The Walt Disney Company was formed in 1923 by brothers Walter and Roy Disney, and at the time focused on producing animated shorts²⁰. During the Disney brothers time with the company—Walt died in 1966 and Roy in 1971—the company received international acclaim for accomplishments such as creating beloved characters like Mickey Mouse, producing animated and live action short and feature length movies, constructing and opening the Disneyland theme park, and planning and purchasing land for Walt Disney World in Florida[1]. This study will discuss and analyze some things relevant to that enterprise, providing new ideas for those who want to analyze that enterprise. These things that will be mentioned are roughly divided into three sections as shown below: Disney's main strategic analysis (this can also be divided into three subsections: Disney Enterprise Overview, the impact of the Covid-19 on Disney (The new crown epidemic has caused losses and even bankruptcy of many industries and their related enterprises, which has also attracted great attention from the society and even the world. Therefore, this paper designs a related topic section.), Disney Future Development Strategy Analysis), Competitor Analysis, Business Valuation Analysis - Based on the methodology taken in this paper.

Regarding the main research on Disney, scholars currently mainly analyze spatial transmedia, materiality, participatory cultures, Entrepreneurship, and curriculum. Among them, Williams (2020) points out that Disney has hired powerful new people to help develop, innovate, and lead Disney's business transfer [2]. Besides, Goldsby et al. (2018) point out "From an entrepreneurial perspective, it is concluded that with the changes in the market and the improvement of audience tastes, enterprises can try some new things based on the original" [3]. In addition, research on corporate investment value, valuation, etc. is also of great concern to the academic community. Among them, Shcherbakova & Shcherbakov (2020) adopted a company value analysis based on the revenue forecast and obtained the research company value analysis [4]. It is generally difficult to predict long-term income, but since it gives a relatively clear summary, it can be used as an effective tool for judging the direction of business development.

Thus, this paper is devoted to researching whether Disney's stock price is reasonable and providing writing ideas for related researchers (Eg. graduate students, and college students). What is the theoretical value of this article? First of all, this paper gives readers a quick overview of the Disney Group; secondly, it makes some of the articles' existing points more complete; and then, it raises the question of whether Disney's stock price is reasonable or not. There are some views; last but not least, it mentions the new crown epidemic that a large group of people is concerned about now and updates some relevant knowledge.

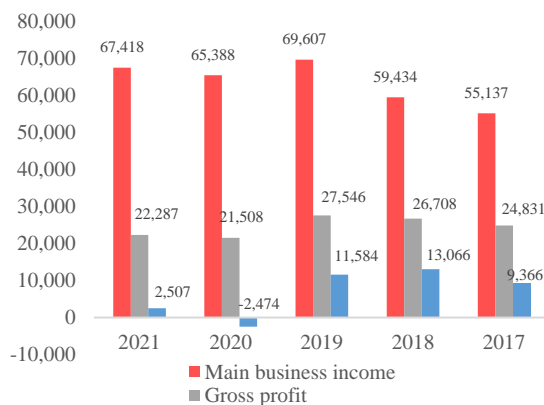
2. Analysis on The Major Strategy of Disney

2.1 Current Strategy of Disney

The Walt Disney Company is an American diversified multinational media in Burbank California. The enterprise is mainly involved in the fields of paradise, film and television, and sport. Among them, the most familiar field is undoubtedly Disneyland. There are six Disneyland which is in Los Angeles, Orlando, Florida, Paris, Tokyo, Hong Kong, and Shanghai [5]. Most of them occupy a superior position. Common marketing methods and products in the paradises include: dolls, limited goods, and services (such as entertainment facilities). In addition, the company attaches great importance to the work culture. Disney instills a sense of respect for customers in its employees, with special emphasis on the importance of diversity in employee recruitment, customer interaction, and employee training [6]. The latest strategy developed by relevant authorities is to hire Mark Boson, former creative director of Apple, to lead Disney's transfer of business, which will help Disney become the forefront of innovation [7]. Secondly, the Disney film module is the basic business of Disney Company. Since the 1990s, Disney has launched a collaborative development strategy of large-scale mergers and acquisitions, successively acquiring Miramax, ABC, ESPN Sports, Fox, Pixar, Marvel, Lucasfilm, and other star companies. Its main products are movies and cartoons. Disney's film and television strategy is to take the animated character IP as its core competitiveness and strive to recreate classic cartoons. In terms of live-action animation, Disney has developed a live-action animation world in many original works (including comics, novels, and many IP films), such as the Marvel Universe or the DC universe [8]. Its company owns five business segments: film and television entertainment, the media network, paradises, resort area, consumer goods, and interactive media, covering almost all links of the animation and film and television industry chain.

2.2 The Impact of Covid-19 on Disney

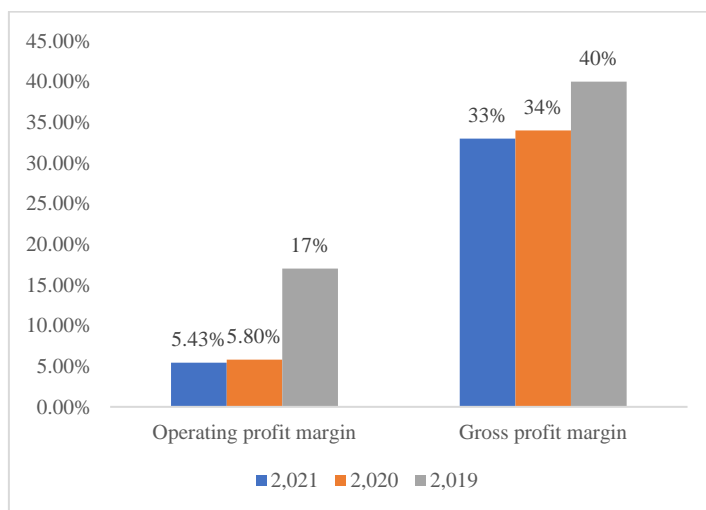
In Figure 1, although overall revenue has been rising in recent years, the company was greatly affected by the pandemic in 2020, including the failure of paradises, and films to operate normally, and the suspension of many film events. As a result, net profit was negative in 2020, but overall profit improved in 2021 as the epidemic subsides or for other reasons.



Data source: <https://www.morningstar.com>

Figure 1. The business income, Gross profit, and Net profit of Disney from 2017 to 2021

The decline in operating profit margin shows that the operating profit provided by sales has decreased in recent years and the profitability of enterprises is weak. The gross profit margin on sales reflects the increase in depreciation, sales tax and surcharge, and cost of sales. As can be seen from Figure 2, the impact of the epidemic on Disney Company has not completely disappeared in 2021. In addition, Disney's competitors in paradises, and the film and television industry have been affected to varying degrees during the epidemic, but they all hope to compete for more benefits in the complex market situation.



Data source: <https://www.tradingview.com>

Figure 2. Operating profit margin and Gross profit margin of Disney from 2019 to 2021

The emergence of COVID-19 has completely broken the inherent development of the film industry and to some extent strengthened people's demand for watching movies online. From the beginning of the epidemic to now, many people's demands for cinema viewing began to decrease, so many film and television companies chose to change their thinking and decided to release films on the Internet, giving audiences more choices. Before the pandemic, Hollywood had the lion's share of the global film market. In the wake of COVID-19, production and distribution schedules have been disrupted and many Hollywood films have had to be withdrawn or postponed. One of the most affected film and television companies is the largest market share of the Disney Company.

The epidemic has had a huge impact on paradises, Most of Disney's theater IP revenue comes from Disney paradises, specifically affected are the theme paradises, experience, and consumer products sectors. However, all product lines and supply chains had to be interrupted during the epidemic, which also caused Disney to suffer huge economic losses during the epidemic. In September 2020, Disney

Paradises, in the US had to lay off 28,000 employees due to the COVID-19 pandemic. Successive years of losses in net profit have led to the failure of the internal operation of Disney paradises, resulting in many unemployed. Because the park has been closed for years, the facilities inside the park still need a large number of funds to maintain, which leads to the vicious cycle of fund income inside the park.

2.3 Future Development Strategy of Disney

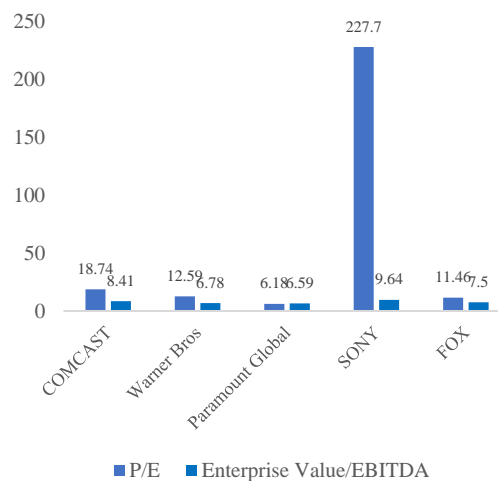
Disney has a wealth of intellectual property resources of its own and has acquired even more through acquisitions over the past decade. And his company has a complete "intellectual property construction, production, distribution, online channels, offline channels, derivative development, retail, theme park" industrial chain[5]. However, in March 2021, Disney decided to close its more than 60 Disney stores in North America after COVID-19 blocked ways to monetize merchandise, which forced the company to shift its business focus to online sales. "While consumer behavior has shifted toward online shopping, the pandemic that has affected the world has changed what consumers expect from retailers" explained Stephanie Young, president of Disney's consumer games and publishing division. As for the construction of the park, Disney has decided to expand the content of its IP address, such as Avengers Campus and Mad Animal. Construction has been planned and started in China and Paris.

In film and television, Disney wants to speed up production while maintaining a higher quality of content. Doug, head of Disney Film and television, believes that as the market changes and audiences' tastes improve, creators have more opportunities, which allows them to try new things outside the original framework[9]. The Marvel series under the TV series is a good breakthrough and development. Since Marvel films are so brilliant and popular with many audiences, Disney plans to shoot more films and television works under the Marvel series, starting with the TV series. The goal is not only to improve the storylines and timelines of their IP universe, but also to expand the distribution channels of content on TV platforms such as Roku, Amazon, Apple, and Flex, and to gain a share of the TV drama market.

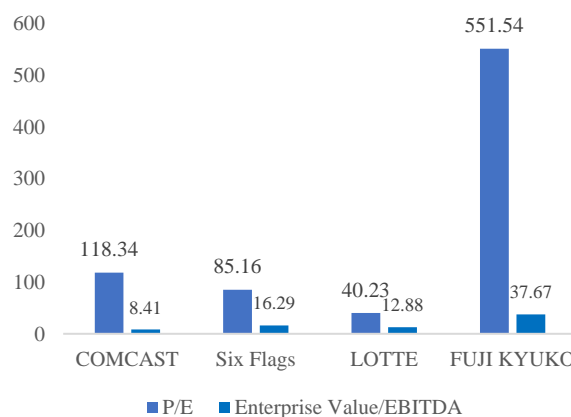
3. Competitor Analysis On Disney

In terms of paradises, FUJI KYUKO, COMCAST (Universal Studios), LOTTE (Lotte world), and Six Flags are chosen as Disney's competitors. All of them are the most influential and most famous paradises in the world. And in fact, these paradises are all around the world. The reason why these companies are chosen is that these companies can make an estimate of the value of Disney+ about paradise more accurate. And in the film field, some well-known companies are chosen, such as COMCAST, Warner Bros, SONY, Paramount Global, and FOX. The big brand and historic companies can make the estimation more proper.

Figure 3 and figure 4 show the basic data of these chosen companies. The figure 3, which describes Paradises filed, shows that except Sony's P/E ratio, there are not many differences between other competitors. And in the figure 4, since FUJI KYUKO's P/E ratio is so high, the median data should be calculated.



Data source: <https://www.morningstar.com>; <https://www.tradingview.com>
Figure 3 The data of P/E and Value/EBITDA of Disney’s competitors in movie field



Data source: <https://www.morningstar.com>
<https://www.tradingview.com>
Figure 4. The data of P/E and Value/EBITDA of Disney’s competitors in the paradise field

4. Results Based On The Multiples Valuation Method

4.1 Method

The method in valuation of Disney is multiples valuation method. Multiples Approach is relatively straightforward as compared to a sophisticated DCF analysis. To value a firm or division using a multiples approach, one needs only two inputs: a set of comparable firms and a set of valuation metrics[10]. Companies with similar attributes should have similar values. This paper uses similar peers to value our company. The formula for a certain characteristic X and the compare objects’ multiple is: $V_{Firm} = M_{PeersX} * X_{Firm}$. Ricardo Goulart & Luiz Paulo Lopes (2018) mention that Firms can be valued using techniques based on (a) accounting values, (b) future perspectives, or (c) relative valuation [8]. In addition, research on corporate investment value, valuation, etc. is also of great concern to the academic community. Among them, Shcherbakova & Shcherbakov (2020) adopted a company value analysis based on the revenue forecast and obtained the research company value analysis [4]. In this paper, the X we choose are P/E ratio and Enterprise Value/EBITDA. We consider that these two indicators can help us to estimate the value of Disney enterprise and Disney stock paccuratelurate.

4.2 Data and Variables

Data of Disney comes from Disney's official website. And other companies' data comes from Morningstar website. The types of financial data used are as follows.

Table 1. The introduction of variables

The type of financial data	Introduction and meaning
Stock Price	Stand for the company's value per stock
EBITDA	Earnings before interest, taxes, depreciation, and amortization
EPS	Reflect on the effect of the operation
P/E	Price/earnings
Enterprise Value/EBITDA	
revenue	Aim to calculate the ratio of different business

Table 2. The outcome of stock price

	Stock Price (\$)
12/31/2021	\$154.89
6/30/2022	\$94.40
Calculation-Median of Movie	\$17.12
Calculation-Average of Movie	\$75.26
Calculation-Median of Park	\$138.38
Calculation-Average of Park	\$270.39

Table 3. The outcome of Enterprise Value

	Enterprise Value (\$)
12/31/2021	\$323,253,200,000.00
current	\$185,414,200,000.00
Calculation-Median of Movie	\$60,436,160,620.43
Calculation-Average of Movie	\$62,724,676,569.26
Calculation-Median of Park	\$241,463,017,247.15
Calculation-Average of Park	\$311,451,697,769.08

4.3 Process of Calculation

The detailed process of calculation:

All Based on the formula:

$$V_{Firm} = M_{Peers_X} * X_{Firm} \quad (1)$$

(1) Calculating the average number and median number of EPS of all the competitors in the film and paradises field individually.

(2) Multiple Average EPS or median EPS times Disney's P/E ratio to calculate Disney's stock price.

(3) Comparing the summary with the current stock price of Disney and analyzing this outcome based on the market situation and financial reports.

(4) Calculating the average number and a median number of Enterprise Value/EBITDA of all the competitors in the film and paradises field individually.

(5) Multiple Average Enterprise Value/EBITDA or median Enterprise Value/EBITDA times Disney's EBITDA to calculate Disney's Enterprise Value.

(6) Comparing the outcome with the current Enterprise Value of Disney and analyzing this outcome based on the market situation and financial reports

The reason why both average data and median data are calculated is that over-large data might

influence other data and might influence the outcome.

The formulas are in the part of enterprise calculation. And based on these formulas, the data of Disney and its competitors are used to evaluate the price and enterprise value of this company. And one important thing of calculation is that since Disney has two main businesses, its price and value should be calculated individually, which means the data of film of Disney with its competitors in the film field and the data of paradises Disney with its competitors in paradises field should be calculated individually.

Table 2 and Table 3 summarize the results. In 2021, the stock price of Disney is 154.89, and the outcome, based on data from the film industry, is less than Disney's stock price. However, calculations based on data from the paradises field show the opposite. And the enterprise value calculation is in table 3, the same as the stock price, the outcome, based on data from the film industry, is less than Disney's current value, but the outcome in the paradises field shows the opposite.

According to the calculations, both the value and stock price of Walt Disney are fair. First is because, the film business and paradises business have different percentages of revenue, and in the film field, Disney has many strong competitors, like Fox and Sony, and these studios have taken some market share. But in the paradises field, Disney takes the lead, though data from Disney's film business suggests Disney is undervalued but the paradises department makes up for it. Disney has its unique characteristics which help it establish itself in the industry. For example, the well-known films, such as Steamboat Willie, Snow White, and Frozen, not only won the audience's praise and gained high income but also shaped countless classic images which have endured through the years. Based on these popular characters, Disney sets up theme paradises to gain profit, and it also sells relevant IP products. This decision is a great success. Many people flock to Disney (Paris, Los Angeles, Shanghai, and so on) to enjoy themselves. Though the operation has been affected, its revenue is still steady, which means it is very competitive in the market. Thus, this paper concludes that both Disney's value and stock price are fair.

5. Conclusion

Aiming at finding out whether Disney's stock price and enterprise value are fair, the paper uses the multiples valuation method to calculate Disney's stock price and enterprise value with an analysis of Disney's strategy and financial report and competitors in different fields. And the main conclusion is that Disney's stock price and enterprise value are fair and based on the outcome, the paper also gives some reasons to explain: firstly, Disney in the film field has many strong competitors but in the paradise field it is dominant, and secondly, Disney has created many famous films and vivid characters which can bring it many profits, and lastly, Disney caters to many people who have romantic fantasy by utilizing its IP and it also sells exquisite products.

The innovation of this paper is to separate Disney's business into two parts and compare these two parts with their correspondent competitors individually, which reduces the risk that different weight of business brings. The conclusion of this paper aims at the public who want to have a glimpse of the stock market and valuation method, giving them a different perspective to have a deep insight into stock market. And also, the main method—the multiples valuation method—is a general method that applies to many situations.

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