Analysis and Prospect of capital management of Listed Companies in the United States -- Taking Walt Disney Company as an example

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Abstract. Under the impact of the COVID-19 pandemic in 2020, the global economy is facing significant downward pressure. Many industries have been hit to some extent, including the entertainment industry. At the same time, cash flow management, as a very important part of financial management, the quality of its management directly affects whether the enterprise can meet the market demand and develop smoothly. Walt Disney Company, as an enterprise established for 100 years, plays an important role in the entertainment industry. Its industry is comprehensive and representative, which can reflect the development and trend of the industry to a large extent. This study will analyze and predict the cash management and cash flow of Walt Disney Company. By focusing on the company's business adjustment and business development trend, as well as the financial data with ARIMA model and graphs of the past 17 years, the prediction of the company's future cash flow can be made, and the future development of Walt Disney Company can be determined. These questions will be of great significance for judging the development of the entertainment industry in the future.

Keywords: Cash management, ARIMA model, strategy.

1. Introduction

With the impact of the epidemic weakening, many companies in various regions of the world are looking for better prospects for development. For many listed companies, better cash management is an important way for them to obtain a better capital structure[1]. At present, the demand for cash management of Listed Companies in the United States is growing, because cash management has an important impact on the company's financial and operational decisions. As a typical listed company, Walt Disney's fund management is of great significance for understanding the development trend of global enterprise cash management.

The research problem of this paper is to evaluate the cash management of Walt Disney Company and look forward to its future development prospects. Through the analysis of the company's cash management, this paper discusses the effectiveness and feasibility of the company's cash management. The purpose of the study is to deepen the understanding of Walt Disney's cash management and provide reference for other listed companies.

This study is of great value to the academic and practical communities. From the academic point of view, this paper makes an in-depth study on the cash management of Listed Companies in the United States, which will help to increase the theoretical understanding of cash management and provide reference for relevant research. From a practical point of view, the analysis and Prospect of Walt Disney's cash management in this paper can provide reference for other listed companies to help them improve fund management and improve enterprise performance. In addition, the results of this study may also trigger research on fund management of other listed companies and promote the development of corresponding research fields.

2. Literature Review

2.1. Significance of Research

This study is of great value to both academia and the community of practice. From the academic point of view, this paper makes an in-depth study on the cash management of Listed Companies in the United States, which will help to increase the theoretical understanding of cash management and provide reference for relevant research. From a practical point of view, the analysis and Prospect of Walt Disney's cash management in this paper can provide reference for other listed companies to help them improve cash management and improve enterprise performance. In addition, the results of this study may also trigger research on cash management of other listed companies and promote the development of corresponding research fields.

2.2. Related Research

As Chih-Wei Wang said, Higher cash flow uncertainty leads to a higher crash risk for firms[2]. So did Christopher Harris and Scott Roark mentioned that cash flow risk has a positive and significant relationship with observed debt levels in the United States[3]. Therefore, a more stable cash flow is of great significance for the stable future development of the company.

What's more, as Benjamin A. Jason concluded, expected changes in cash flows are the primary driver of stock returns [4]. This view also explains the significance of cash flow management for the company's market value, and urges the author to further analyze cash flow management.

Ran Jiao [5] focused mentioned in her essay that working capital management cannot be limited to the scope of financial data. Only the harmonious operation of three levels of physics, business and human management can realize the optimal efficiency of capital management. This makes me realize the important role of the company's decision-making in predicting the company's future cash management.

Shixing Zhao and Yucheng Liu[6] mentioned in their essay that the management of transportation funds should be linked with various channels, expand from a simple financial perspective to a multi-level perspective, and break away from the shackles of pure financial research, which is the general trend of future development. This is also the reason why this paper focuses on analyzing the division and coordination of different business segments and departments of Disney Company

A paper from Christopher Harris and Scott Roark[7] highlighted that firms with higher levels of operating cash flow have no significant relationship between cash flow risk and debt levels, which made me think thoroughly about the importance of operating cash flow and investing cash flow separately.

2.3. Review

Through the literature review and analysis of the current theme, The author have a deeper understanding of the cash management and outlook of Listed Companies in the United States. My research practice includes reading and analyzing the relevant literature, understanding the arguments and research methods put forward in the paper, and summarizing the development trend and shortcomings of the cash management of Listed Companies in the United States. Further research can explore more new research directions to improve the efficiency and quality of cash management.

3. Current Situation of Walt Disney's Cash Management

In order to better analyze the cash flow of Disney Company and make better estimates, this paper first analyzes the business situation and business composition of Disney Company.

3.1. Introduction to Walt Disney Company

3.1.1. Business Composition

Disney was founded in 1923 cand becomes the Global leader in entertainment and media.The business of Disney can be divided into these five parts: Film Production, Theme Parks and Resorts, Media Networks, Consumer Products, Entertainment Event. These five different business segments have expanded Disney's business reach, enhanced profitability, and elevated its position in the market.

As a centaury-long company, Disney has become an integral part of global culture. What's more, Disney also commitment to creating captivating entertainment experiences and expanding global influence and embracing industry changes and innovations.

3.1.2. Introduction to Important Business

(1) Disney parks, experiences and products

When it comes to Disney, the first thing many people think of is definitely Disneyland. The fairytale like dreamy paradise and various animated characters make many people linger and forget to leave. In fact, in addition to Disneyland, there are also many offline places that can lead people from reality to a dream world. Disney parks, experiences and products around the world are as follows: Walt Disney World Resort, Disneyland Resort, Disneyland Paris, Shanghai Disney Resort, Tokyo Disney Resort, Hong Kong Disneyland Resort, Disney Vacation Club, Aulani, a Disney Resort & Spa and storyliving by Disney.

As for the consumer products, Disney has merchandise licensing which means royalties from licensing our IP for use on consumer goods and retail which means sales of merchandise through internet shopping sites generally branded shopDisney and at The Disney, Store, as well as to wholesalers (including books, comic books and magazines.

For a company, revenue is closely related to cash flow, the major revenue of Disney parks, experiences and products are as follow: Theme park admissions, Parks & Experiencesmerchandise, food and beverage, Resorts and vacations, Merchandise licensing and Retail.

(2) Film and television businesses under Disney

The film and television business is also an important part of Disney, which contains the streaming services, film and television business and ESPN.

The streaming services include platforms including Disney+, Disney+ Hotstar, ESPN+, Hulu and Star+ direct-to-consumer (DTC) video streaming services. Committed to bringing Disney's services and fun to people around the world through online means.

The film and television business, as the name suggests, it is mainly responsible for the filming and distribution of Disney's animation, live action movies, and TV dramas. Including Motion picture production and distribution under the Walt Disney Pictures, Twentieth Century Fox, Marvel, Lucasfilm, Pixar and Fox Searchlight Pictures and Blue Sky Studios banners.

The major revenue of film and television business includes Box Office Revenue, Home Entertainment, Television Distribution, Music Distribution, Stage Plays, Merchandise Licensing and Subscription fee.

3.2. Operation Situation of Walt Disney

Through the analysis of the financial statements of Disney Company in recent years and the analysis of Disney Parks, Experiences and Products(DPEP), the data of operating income is obtained and drawn into a chart. For the obtained data, this paper uses Excel to analyze the data and draw a line chart(Fig.1).

3.2.1. Operation Situation Analysis of Disney Parks, Experiences and Product(DPEP)

In order to better analyze and predict the cash flow situation of Disneyland and propose more appropriate suggestions, this article first analyzes the cash flow situation of DPEP. The selected research data is operating income.

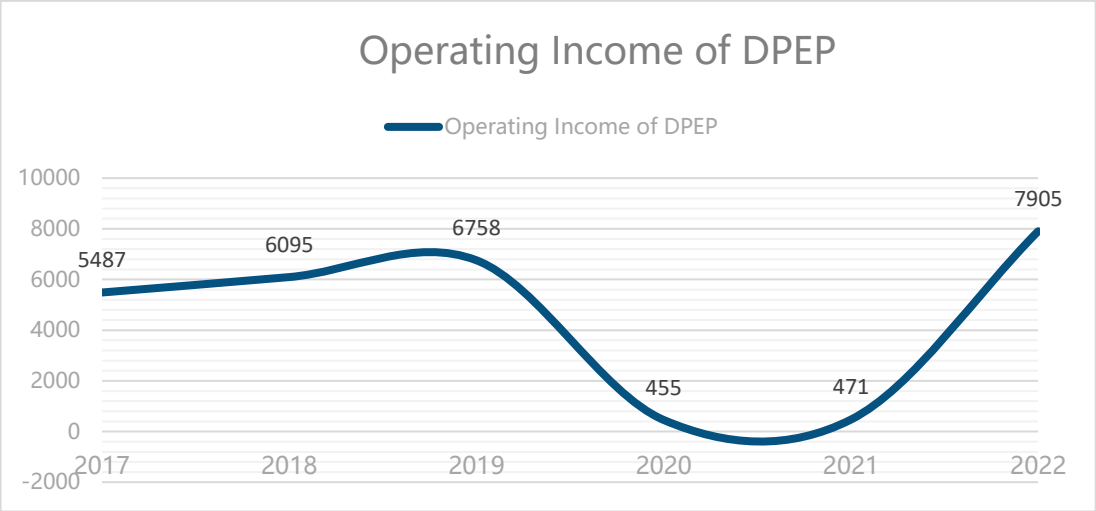


Figure 1. Operating income of DPEP

From the Fig.1, due to the impact of the epidemic, the operating income of Disney suffered a great loss, but after the impact of the epidemic was eliminated, their income quickly rebounded. Until 2019, operating income has maintained an upward trend and reached its peak in 2019. However, in 2019, due to the impact of the epidemic, DPEP, as an offline industry, was greatly affected and had a very big decline. In 2022, with the lifting of the epidemic ban in many countries, retaliatory tourism and retaliatory consumption occurred. So in 2022, Disney's DPEP industry rebounded greatly.

3.2.2. Operating Situation Analysis of Disney Media and Entertainment Distribution(DMED)

For the analysis of DMED, a newly established business, this paper focuses more on its revenue. Due to the late establishment, only 2018-2022 data can be obtained in the financial statements. For the obtained data, this paper uses SPSS to analyze the data about the revenue of DMED from 2018 to 2022 and draw a line chart.

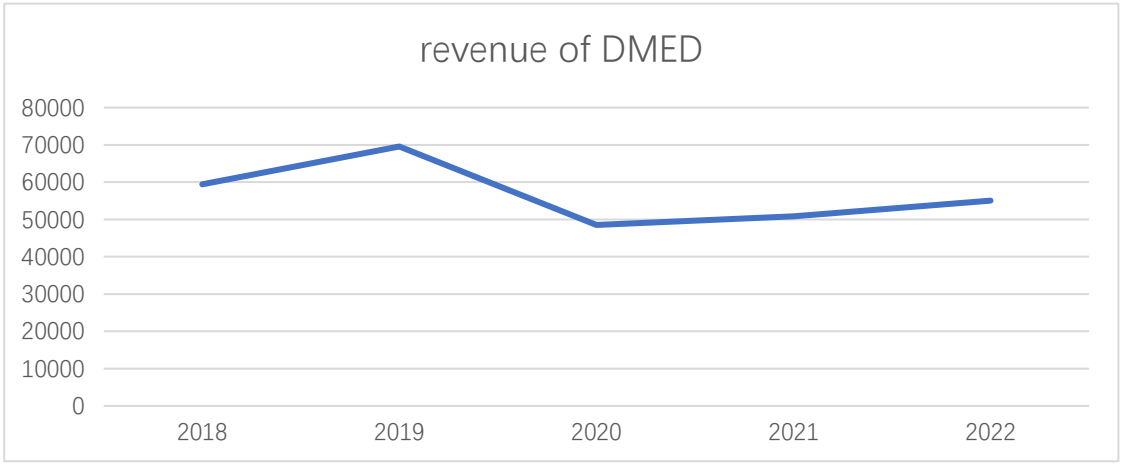


Figure 2. revenue of DMED

It can be seen in the Fig.2 that DMED's revenue peaked in 2019. The reason is that in the initial period of its establishment, with the popularity of the network, more and more users of streaming media are willing to pay for streaming media. In 2020, due to the impact of the epidemic, many people's economic situation has been hit, and there is no longer enough "spare money" to invest in entertainment. As the impact of the epidemic gradually dissipated, revenue rebounded to a certain extent. But the previous impact still exists, so the recovery is relatively slow.

DMED's revenue has also decreased under the impact of the epidemic, but due to its streaming nature, it has not been as impacted as DPEP.

3.2.3. Development Tendency

It can be inferred that the overall financial situation of Disney Company is not optimistic during the epidemic period, because the main business of Disney Company fluctuated significantly during the epidemic period. With the gradual weakening of the impact of the epidemic on the world, the future of Disney is optimistic.

4. Analysis of Walt Disney's Future Development

4.1. Prediction Model

This research chose ARIMA to analyze Disney's revenue growth rate, Cost of Goods Sold (% of Revenue), Depreciation & Amortization (% of PP&E Open Bal), Tax Rate, Accounts Receivable (Days), Inventory (Days), Accounts Payable (Days), over the next five years.

ARIMA is mainly composed of three parts: autoregressive model (AR), Integrated (I) and moving average model (MA).

The data used for analysis is from Tonghuashu official website.

The formula of ARIMA model is

$$Y_t = c + \varphi_1 Y_{t-1} + \varphi_2 Y_{t-2} + \ldots + \varphi_p Y_{t-p} + \theta_1 \epsilon_{t-1} + \theta_2 \epsilon_{t-2} + \ldots + \theta_q \epsilon_{t-q} + \epsilon_t \quad (1)$$

Y_t: The time series data we are considering.

$\varphi_1$toφ_p: The parameters of AR model, which are used to describe the relationship between the current value and the past P time points.

$\theta_1 to \theta_q$: The parameters of MA model are used to describe the relationship between the current value and the error of the past Q time points.

ϵ_t: Error term at time point t.

C: a constant term

Through the above formula, the relevant data of the study can be analyzed and further predicted to obtain a relatively more accurate estimate.

4.2. Prediction of data

4.2.1. ors and assumptions

The AR deals with the autoregressive part of the time series, which takes into account the effect of observations over several periods in the past on the current value [8].

The Integrated is used to make the non-stationary time series stable, and eliminates the trend and seasonal factors in the time series through first-order or second-order difference processing.

the MA is used to deal with the moving average part of the time series, which takes into account the influence of past prediction errors on the current value.

Combining these three components, the ARIMA model can both capture trends in data and handle data that is subject to temporary, sudden changes or loud noise.

In order to improve the accuracy of the forecast, we selected the last 15 years of Disney's financial data and used spss to build an ARIMA model to analyze these data

These are Prediction curves produced by ARIMA

4.2.2. result of prediction

By substituting Disney's data from 2012 to 2022 into formula (1), we can calculate and obtain the corresponding chart.

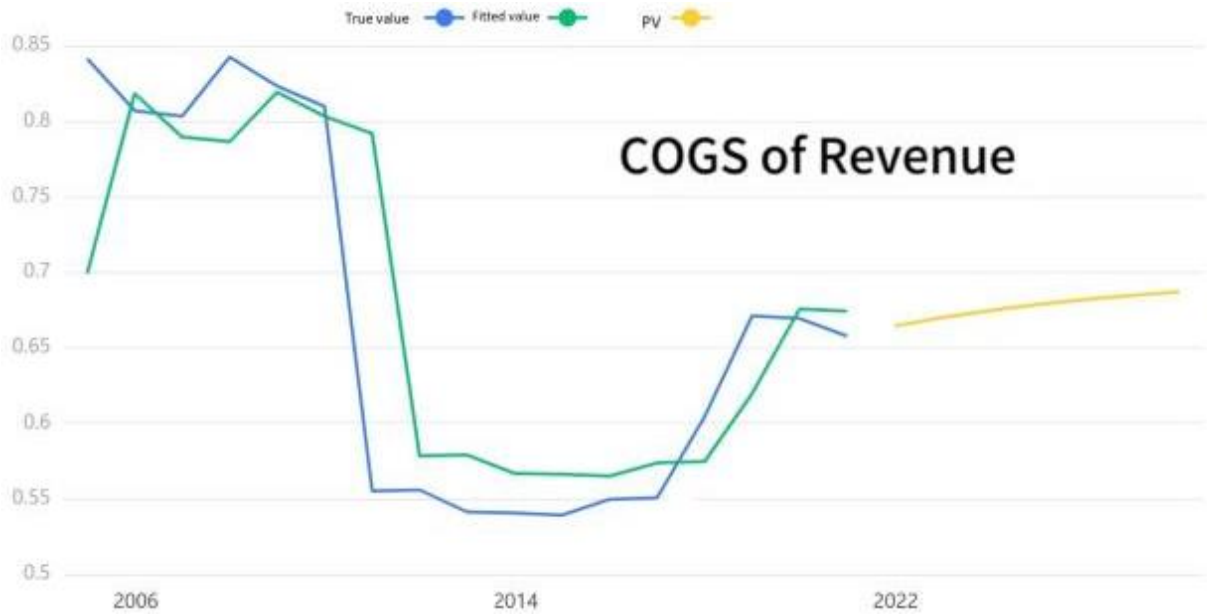


Figure 3. COGS of revenue

Through Fig. 3, We can see that the cost of goods sold (COGS) is expected to increase in the future, which will mean that the increase in cost will lead to changes in cash flow.

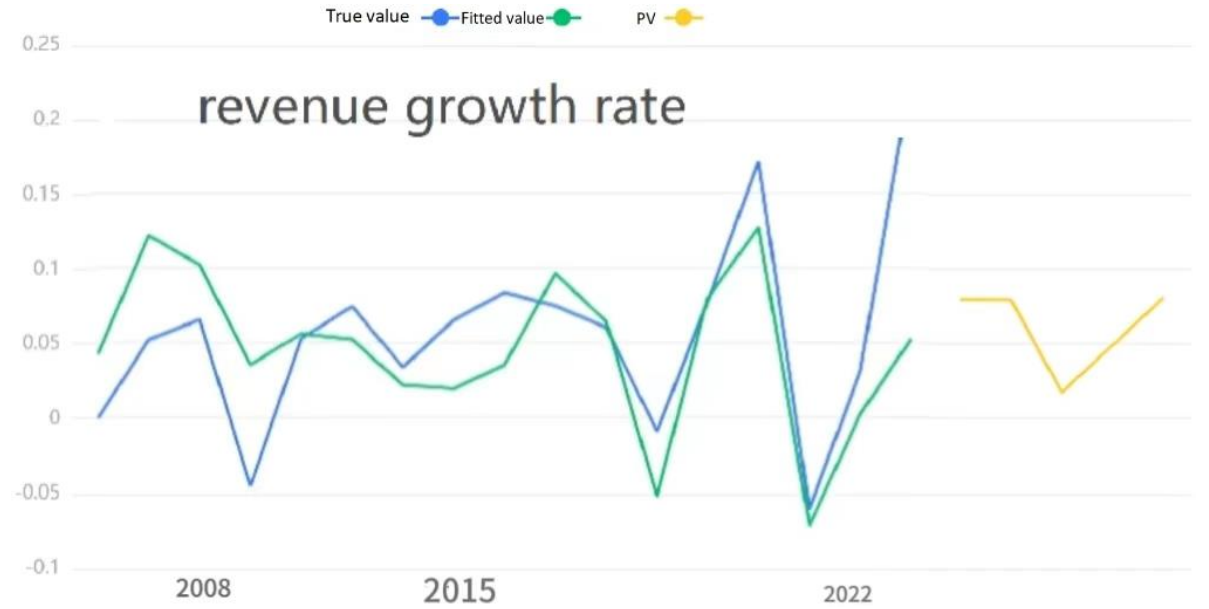


Figure 4. Revenue growth rate

From Fig.4 We can find that in the next five years, Disney's earnings will face a large downward trend, with great downward pressure. This also means that in the future development, cash flow management has great significance [9].

The above chart is fitted and predicted by SPSS.

In view of the existing problems of Disney Company, it should be noted that the company's working capital is tight due to the impact of the epidemic.

As for the investment cash flow, we can find that there is a large reduction after 2020. The reduction of investment cash flow can indeed reduce the investment risk, reduce the cost level and improve the profitability in the short term, but it does not mean that this is a good way, at least not a long-term sustainable choice. This reflects Disney's ongoing commitment over the next five years to capital expenditures, strategic investments, and new project development. While these investment activities might lead to short-term cash outflows, they are expected to provide robust support for the company's long-term growth and competitiveness. While maintaining a negative investment activity

cash flow, Disney needs to monitor market competition and changing consumer demands, maintaining flexibility in investment decisions to better balance short-term investment costs with the potential for long-term growth.

Disney's operating cash flow demonstrates a trend of increasing year by year, particularly in the coming one to two years where a significant growth is anticipated. The driver behind this growth is the gradual resolution of the pandemic, the global economic and entertainment industry recovery, and Disney's ongoing innovation and development across multiple business sectors. As global efforts to control the pandemic progress, the demand for outdoor entertainment creates additional revenue opportunities for the company. Disney's strategic investments in content production, streaming services, theme parks, and other fields are also poised to yield more growth prospects. However, Disney still needs to be cautious of potential risks such as intensified market competition and potential pandemic resurgence.

Based on the analysis of historical data and forecasts for the next five years, Disney's cash flow demonstrates a sustained growth trend. This trend highlights the company's exceptional performance in creativity, entertainment content, and global market expansion, indicating that Disney is poised to maintain a robust financial standing over the next five years. This growth is not solely attributed to the strong performance of its core business but also underscores Disney's proactive efforts in exploring emerging sectors and investing in innovative projects. However, while sustaining growth, it remains crucial to remain sensitive to market competition, industry shifts, and economic fluctuations to adeptly tackle potential challenges. In summary, Disney is expected to continue achieving substantial cash flow growth over the next five years, providing reliable value to investors.

5. Countermeasures and suggestions for problems

5.1. Problems

In terms of operating capital, Disney's current operating capital is at a low level, and maintaining this level is not conducive to the company's continued development in the future. If Disney continues to maintain a low operating capital in the future, the company is likely to face many problems in the future.

Compared with the operating cash flow, Disney's investing cash flow is relatively at a better level. However, there is great uncertainty in the future. It is worth noting whether Disney can continue to maintain a good level of investing cash flow. In order to maintain a better level of investing cash flow, Disney still needs to take certain measures[10].

5.2. Solutions

When it comes to operating cash flow, the driver behind this growth is the gradual resolution of the pandemic, the global economic and entertainment industry recovery, and Disney's ongoing innovation and development across multiple business sectors. As global efforts to control the pandemic progress, the demand for outdoor entertainment creates additional revenue opportunities for the company. Disney's strategic investments in content production, streaming services, theme parks, and other fields are also poised to yield more growth prospects. However, Disney still needs to be cautious of potential risks such as intensified market competition and potential pandemic resurgence.

As for the investing cash flow, this reflects Disney's ongoing commitment over the next five years to capital expenditures, strategic investments, and new project development. While these investment activities might lead to short-term cash outflows, they are expected to provide robust support for the company's long-term growth and competitiveness. While maintaining a negative investment activity cash flow, Disney needs to monitor market competition and changing consumer demands, maintaining flexibility in investment decisions to better balance short-term investment costs with the potential for long-term growth.

6. Conclusion

Based on the above research, it can be concluded that the investing cash flow of Walt Disney Company in the next five years will be more stable and maintain a negative level compared with the epidemic period. At the same time, the operating cash flow shows an upward trend year by year, and will also rise to a certain extent compared with before the epidemic. Finally, we can infer that the total cash flow will show an overall upward trend. The above conclusions will provide guidance and guidance for the future research on the recovery of the entertainment industry after the epidemic, and contribute to the continued development of this research field.

The current research still has some deficiencies, such as not analyzing in detail the overall impact of changes in different types of industries under Walt Disney, and not considering the impact of possible changes in policies on the conclusion. All the above can be improved in this direction in the future.

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