The Operation of Disney Affected by COVID-19

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ABSTRACT
From 2019 to 2020, the world is experiencing severe period of novel coronavirus pneumonia, which will have a huge impact on the global financial industry. Disney, the world’s largest entertainment media empire, has also been hit hard. This paper mainly adopts the method of data analysis and comparison, analyzes Disney's operating conditions before and after the outbreak of COVID-19 (2019-2020) from Disney's revenue composition and several representative data, and analyzes the risk factors of operation. And it came to the following conclusion: COVID-19 hit Disney’s economy hard. But it is also beneficial for people to create new industries under the traditional business model to seek new development.

Keywords: COVID-19, Disney, Operations, Economy

1. INTRODUCTION
Affected by COVID-19, the global tourism industry still cannot wait for the dawn, and even the fairy tale kingdom Disney cannot escape the impact. This is mainly reflected in the ban on mass gatherings (which affects theme parks and film distribution) and medical quarantines (which affect its streaming service and TV service in the United States) [1]. For much of the past two years, theme parks that have been closed or operated have seen marked declines in capacity [2], and they have seen increases in revenue, refunds and customer requests, all of which heighten financial risk. Disney has furloughed as many as 100,000 employees and closed major parks around the world. Compared to the same period, Disney's economic indicators began to fall off a cliff. The purpose of this paper is to examine the impact of covid-19 on Disney's operations and to analyze how Disney is responding to the sudden and inevitable crisis. Gain experience in the process and prepare for future situations.

2. THE CHANGE OF DISNEY’S REVENUE STRUCTURE

![Figure 1. The Change of Disney’s revenue structure in 2019-2020 (Hundred million dollar)](image-url)
Disney's revenue structure is mainly composed of these parts: Media Networks; Parks, Experiences and Products; Studio Entertainment; Direct-to-Consumer and International (DTCI).

Under the catalysis of the epidemic, compared with the sharp decline in the park business, consumers' demand for online content has soared, and Disney's online business has grown under the epidemic. The accelerated layout of the online business has become Disney's life-saving straw. Disney+ [3], which was officially launched in November last year, has also experienced explosive growth. According to the 2020 annual report data, revenue from theme parks, resorts and consumer goods business, media network revenue accounted for 36%, film and television entertainment revenue accounted for 36%, and streaming media business accounted for 13%.

Figure 2. Disney’s revenue structure in 2021 (Hundred million dollars)

The figure shows the composition of Disney's revenue structure in 2021. Among them, yellow, gray, orange, and black represent theme park and consumer revenue, film and television entertainment revenue, the direct-to-consumer and cable network revenue, respectively. According to the latest data, cable network revenue in the fourth quarter of 2021 was $7.706 billion in the quarter, flat compared to the same period; the direct-to-consumer business achieved revenue of $4.69 billion, a year-on-year increase of 34%, but the operating loss increased by 27% to 6 hundred million U.S. dollars. The increase in operating losses was primarily due to increased losses from Disney+ and, to a lesser extent, ESPN+, partially offset by improvements in Hulu's performance, which also reflected higher content, technology, and marketing costs across the three platforms [4].

Film and Television Entertainment reported revenue of $2.433 billion for the quarter, up 43% year over year. Segment operating results fell to $98 million from $188 million, due to lower theater performance and marketing costs associated with film releases.

The financial report mentioned that during this period, "Spider-Man: No Home", "West Side Story", "Full House", "Ace Agent: Origin", "Eternals", "Jade Face Love Demon" and "The Last Duel" were mainly released. Wait for seven movies. Among them, "Spider-Man: No Home", the final piece of the hero series in cooperation with Sony, has a global box office of 1.777 billion US dollars and an IMDb score of 9.0. The high box office and high reputation have injected a lot of money into Disney.

In addition, the revenue of Disney's theme parks, experiences and derivatives revenue in the quarter was $7.234 billion, which doubled compared to the same period and exceeded analysts' consensus estimate of $6.4 billion, and segment operating results increased by $2.6 billion to $2.5 billion. The same period last year was a loss of $100 million. The massively recovered theme park revenue set Disney's second-best quarterly performance ever.

3. RELEVANT DATA ANALYSIS

3.1. Net profit margin

Net profit margin shows the percentage of a company's sales revenue after deducting all costs, which can comprehensively reflect a company's operating efficiency. Disney's ratio of net profit to total revenue fell from 44.94% in 2018 to 39.57% in 2019, then dropped further to 32.89% in 2020, and finally rose to 33.06% in 2021. As a result, Disney's operational efficiency has been affected by COVID-19, which first fell and then rose [5].
Table 1. Disney's Net Profit Margin in 2018-2021 (billion dollars)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net profit</td>
<td>26708</td>
<td>27546</td>
<td>21508</td>
<td>22287</td>
</tr>
<tr>
<td>Total revenue</td>
<td>59434</td>
<td>69607</td>
<td>65388</td>
<td>67418</td>
</tr>
<tr>
<td>Ratio</td>
<td>0.4494</td>
<td>0.3957</td>
<td>0.3289</td>
<td>0.3306</td>
</tr>
</tbody>
</table>

In addition, lower net profit margins will affect the increased competition or higher costs. Shareholders are more concerned about the net profit margin, as it shows how well the company is turning revenue into profit. As a result, Disney's net profit margin makes shareholders lose their incentive to invest.

3.2. Capital turnover rate

Table 2. Disney's capital turnover ratio in 2018-2021

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital turnover</td>
<td>0.61</td>
<td>0.48</td>
<td>0.33</td>
<td>0.33</td>
</tr>
</tbody>
</table>

The total asset turnover ratio represents whether a company's total assets are effectively used in actual operations. The higher the asset turnover, the more efficient the company is. Conversely, a low asset turnover ratio indicates that a company is not effectively using its assets to generate sales. If a company's total asset turnover rate is close to 1, it means that the company's total asset management capability is normal. If the total asset turnover ratio is less than 1, it means that this is a cash-burning company, and it must be immediately determined whether the company currently has enough cash for operations. As the table shows, the capital turnover ratio dropped from 0.48 in 2019 to 0.33 in 2021. This is a warning sign. However, asset turnover remains unchanged in 2020-2021, which bodes well for operational efficiency and is a sign of recovery.

3.3. Earnings Per Share (EPS)

Table 3. 2018-2021 Disney EPS

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS</td>
<td>8.40</td>
<td>6.68</td>
<td>-1.58</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Earnings per share helps investors understand the effectiveness of a company's cash management and are considered an earnings ratio that indicates a company's ability to generate profits. The profitability of a company and the profits it generates are important to shareholders. As the table shows, Disney's EPS fell from 8.4 in 2018 to 1.1 in 2021. This shows that companies are using their resources in an inefficient way and that investors don't have much interest in investing.

4. RISK AND REGULATION

4.1. Changes in Disney's operating risk factors before and after COVID-19

4.1.1. Before COVID-19

Declining economic activity in the U.S. and the rest of the world, coupled with the inconsistency of company products with consumers’ tastes and preferences can adversely affect business demand. In addition, changes in Disney's own business strategy or business restructuring could increase costs and reduce Disney's revenue and earnings.

Additionally, various uncontrollable events may reduce demand for Disney's products and services, impair Disney's ability to provide products and services, or increase the company’s costs to provide products and services. For example, the riots in Hong Kong in 2019 have affected the profitability of Disney's Hong Kong business, as have special weather conditions in other regions such as hurricanes.

4.1.2. After COVID-19

Global economic activity has fallen due to COVID-19, and the affected businesses have been the source of most of Disney's revenue [6].
Due to Disney's increased leverage, some credit rating agencies may downgrade Disney's credit rating. Debt ratings could be downgraded further, negatively impacting borrowing costs. Companies may use cash balances or future financing to fund some of their operating and business investments due to reduced operating cash flow [7]. Certain other assets may also be impaired, including further impairment of goodwill and intangible assets.

4.2. VAR model valuation and measures

The VAR model is a risk analysis tool and does not represent the actual fair value loss that will occur to the company, nor does it take into account the potential impact of favorable changes in market factors.

<table>
<thead>
<tr>
<th>Fiscal 2019</th>
<th>Interest Rate Sensitive Financial Instruments</th>
<th>Currency Sensitive Financial Instruments</th>
<th>Equity Sensitive Financial Instruments</th>
<th>Commodity Sensitive Financial Instruments</th>
<th>Combined Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year end fiscal 2019 VAR</td>
<td>$317</td>
<td>$28</td>
<td>$1</td>
<td>$2</td>
<td>$322</td>
</tr>
<tr>
<td>Average VAR</td>
<td>180</td>
<td>25</td>
<td>1</td>
<td>2</td>
<td>63</td>
</tr>
<tr>
<td>Highest VAR</td>
<td>317</td>
<td>28</td>
<td>1</td>
<td>2</td>
<td>322</td>
</tr>
<tr>
<td>Lowest VAR</td>
<td>39</td>
<td>23</td>
<td>1</td>
<td>1</td>
<td>51</td>
</tr>
<tr>
<td>Year end fiscal 2018 VAR</td>
<td>32</td>
<td>32</td>
<td>1</td>
<td>1</td>
<td>44</td>
</tr>
</tbody>
</table>

**Figure 3. Changes in VAR values in 2019**

<table>
<thead>
<tr>
<th>Fiscal 2020</th>
<th>Interest Rate Sensitive Financial Instruments</th>
<th>Currency Sensitive Financial Instruments</th>
<th>Equity Sensitive Financial Instruments</th>
<th>Commodity Sensitive Financial Instruments</th>
<th>Combined Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year end fiscal 2020 VAR</td>
<td>$304</td>
<td>$29</td>
<td>$81</td>
<td>$1</td>
<td>$323</td>
</tr>
<tr>
<td>Average VAR</td>
<td>439</td>
<td>37</td>
<td>32</td>
<td>3</td>
<td>448</td>
</tr>
<tr>
<td>Highest VAR</td>
<td>718</td>
<td>57</td>
<td>81</td>
<td>5</td>
<td>742</td>
</tr>
<tr>
<td>Lowest VAR</td>
<td>221</td>
<td>19</td>
<td>1</td>
<td>1</td>
<td>223</td>
</tr>
<tr>
<td>Year end fiscal 2019 VAR</td>
<td>317</td>
<td>28</td>
<td>1</td>
<td>2</td>
<td>322</td>
</tr>
</tbody>
</table>

**Figure 4. Changes in VAR values in 2020**

Consolidated VAR increased from $322 million on September 28, 2019 to $323 million on October 3, 2020. In response to the risks, Disney has also taken corresponding measures. For example, in October 2020, Disney announced a restructuring of its media and entertainment business to accelerate the company's direct-to-consumer strategy. In addition, Disney began to pay more attention to its investment in the media market.

The competition between Disney+ and Netflix for user increment also indicates that the competition in the entire streaming media market will intensify, and major platforms will increase their investment in content and marketing on the basis of maintaining their core advantages [8]. For example, Amazon has a healthy information flow through advertising revenue, and Apple has hardware facilities and is increasing its IP content library storage; Netflix has prepared no less than 80 movies of various types. According to 2022 "Financial Times" report, the annual investment of Netflix in content is estimated to exceed $17 billion [9].

With the normalization of the epidemic and the improvement of prevention and control capabilities, Disney parks and resorts around the world are gradually reopening, and passenger flow and per capita consumption income are gradually approaching the right track. In addition, at the end of September last year, Lingna Belle, a new character launched by Shanghai Disneyland, quickly occupied the topic list of major social platforms in China. This top-stream effect has also led to an increase in the number of tourists visiting the park and the level of consumption in the park [10].

5. CONCLUSION

Through the analysis of revenue structure, COVID-19 has greatly affected the revenue of traditional theme parks and audio-visual media, causing huge pressure on short-term capital flows. Disney's traditional business is growing slowly, and the living space of traditional TV will continue to be compressed. However, the growth of the emerging streaming media business exceeds expectations. In addition, different financial data sets reflect Disney's inefficient use of resources, insufficient investor interest and shareholder confidence. Disney needs to focus on the company's liabilities and funding. A series of mergers and acquisitions made the company's debt situation not optimistic. The impact of goodwill impairment requires attention. Disney needs to work hard to restore shareholder interest in investing.

This paper lacks research on data, and mainly focuses on the impact of Disney's economy before and after the...
outbreak of COVID-19 in the past two years. The data collected and the impact of exploration are relatively limited. If there is a chance in the future, it will focus on a longer time period, and will automatically model to analyze the latest data in 2022 and make predictions about future development trends. In addition to the impact of COVID-19 on Disney, it has also widely affected many other companies around the world. It is hoped that the analysis can provide constructive suggestions for the development of other companies and provide a strategic plan for revitalizing the company's economy.

REFERENCES


