Corporate Value Investing Research in Covid-19 - A Case of Starbucks

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ABSTRACT
Value investing research has been an important component of economic researches. Covid-19 has changed the general global economic environment and hindered normal social activities since the end of 2019, with dramatic effects on various industries. Particularly, it has brought severe challenges to the development of the catering industry. Our research examines the value investing analysis of companies in the wake of the outbreak of COVID-19, using Starbucks as a case. To provide more analysis direction for investors in the catering industry in the post-epidemic era. In this research, both quantitative and qualitative analyses that include the ratio analysis, trend analysis, and SWOT analysis are used to analyze the value investing of Starbucks. The results of this research are as follows: after the outbreak of the COVID-19, the cash flow flexibility of Starbucks has gradually declined, and the offline revenue has decreased. However, Starbucks has strong corporate soft power, unique service, and brand value that other competitors cannot surpass in the short term; Starbucks also has adopted a series of new initiatives to mitigate the negative impact of covid-19. This is an important driving force for Starbucks turning the crisis into an opportunity in the post COVID-19 era. It has also become a highlight for Starbucks to attract capital. The research of this paper can also be extended to the catering industry and even the whole economic environment, providing practical experience for the research of enterprise value in the covid-19 environment.

Keywords: Covid-19, Value Investing; Starbucks; Quantitative analysis, Qualitative Analysis

1. INTRODUCTION
Since the end of 2019, the Covid-19 disease has spread all over the world. On 30 January 2020, WHO announced that the Covid-19 outbreak is a PHEIC (public health emergency of international concern), the highest level of urgency in WHO’s ranking. Until June 9th, 2021, the total number of confirmed cases in the world is 173,674,509, with a total of 3,744,408 deaths [1]. The Covid-19 impacts not only public health but also the macroeconomic trend. This epidemic causes the recession of the global economy. The Covid-19 crisis is a combination of financial recession and public health issues. At the beginning of Covid-19, the impact started from the supply-side of the economy [2]. Due to health concerns, governments forced closing firms and schools to make people stay at home and avoid infections. On the other hand, Moreira and Hick [2] also find that the supply-side impact will impact the demand-side. Staying at home means reductions in consumption activities outside, which reduce consumption. Besides, people may need to save money during the epidemic. Thus, the demand-side will also be influenced. As time goes, the financial crisis will last further than the health crisis.

On the one hand, the public health regulations reduce the consumers of the catering industry; on the other hand, the virus makes the daily operations of the catering industry at risk of infections. Therefore, companies and stores in the catering industry hard to operate and generate revenue, which will lead to depreciation of their value. The devaluation of companies’ stocks is the concern of companies themselves and investors.
Value investing is an old way of investment. The concept of value investing is proposed by Graham and Dodd [3] in the book *Security Analysis*. On page 17, they encourage investors to attach importance to the company’s intrinsic value and find the differences between the intrinsic value and the market price. As they stated on pages 22-23, they set two conditions for finding securities overvalued or undervalued: market prices always deviate from the true value of securities; then, there is a trend of the two values aligning. As a result, the core idea of value investing is to analyze and find securities that are undervalued so that profits are generated when the price of those securities aligns with their value. At the same time, they also proposed an important concept in value investing – intrinsic value. However, they also recognized the flexibility of defining this concept.

The concept of value also affects subsequent research of value investing. According to Chee, Sloan, and Uysal [4], the fundamentals used by researchers for value investing are followed the suggestion from Graham and Dodd, namely the current book value or proxies of earning power. Thus, for example, Fama and French [5] use the book-to-market ratio to measure relative value, and Lakosiki [6] use the combination of the book-to-market ratio and the annual earnings-to-price ratio to measure relative value. Similarly, indices, which indicate the performance of stock markets, are also influenced by similar methods to measure how the intrinsic values of stocks reflect in the market.

On the other hand, strategies of value investing are the bridges that connect the value investing method to its practical use. According to Battisti et al. [7], the chronicled development of strategic approaches of the value investing are:

Graham and Dodd: invest is like manage a company following principles of the business economy. This strategy involves a concept of “margin safety”, the differences of the investment amount, and the intrinsic value of a stock (Graham, as cited in Battisti et al., 2019). To ensure enough margin safety of investing, investing value stocks – stocks with the low price to book value ratio, price to earnings ratios, price to cash flow ratio, or the high dividend to price ratio, are the choices of high returns rather than those “glamour stocks” [7];

Fisher: investing in growth stocks is the best alternative when Graham’s approach is not effective;

Fama and French classify the value based on Graham’s standard and establish the company with a low price to book value ratio. A low market value has a higher return over larger companies. In addition, they also proposed a model with three factors for the value investing method;

Lakonishok, Shlefer, and Vishny: prove the value investing method is highly rewarded by researching behaviors of investors. “Value stocks become underpriced, and glamour stocks become overpriced in relation to their fundamentals”.

Apart from the value investing strategy itself, the external factors in value investing practices are also an area of research. Kok, Ribando, and Sloan [8] suggest that analyzing simple ratios, which Graham and Dodd do not value, is helpful with the assistance of computers and financial databases. From the aspect of business cycles [9], value investing performs better than growth investing in all economic conditions; value investing performs better in contraction periods than in exposition periods. The quality of investors – patience is also a determinant of successful applications of value investing [10].

Although lots of research on the value investing method focuses on determining the intrinsic value of companies and stocks and applying this method, the instruction on certain industries and specific economical periods is still in deficiency. As one of the industries that Covid-19 seriously influences, the catering industry seriously influences the investment in this industry in such a though the period is a concern. This paper will take Starbucks as a case and apply fundamental analysis as an example of value investing analysis for the catering industry in the Covid-19 impact.

2. DATA AND METHOD

2.1. Data

To explore the future development suggestions of Starbucks under the influence of COVID-19, this article selects the financial data, stock data, and second-hand Internet data of Starbucks from 2018 to 2020, which come from the annual report of Starbucks Corp. [11-13] the NASDAQ website [14] and disclosure of the board meeting.

Starbucks Corporation (“Starbucks”) is the premier roaster competing in the consuming food industry. Its stocks have been traded on NASDAQ Global Select Market (“NASDAQ”) under the symbol “SBUX” since 1985. It sells coffee, teas, bakery food, and other beverage products in the company-operated stores. It also licenses trademarks to other channels to sell products, such as license stores, grocery stores, and other food services. The Global Coffee Alliance realizes this licensing with Nestle S. A. (“Nestlé”). Starbucks also provides goods and services by other brands: Teavana, Seattle’s Best Coffee, Evolution Fresh, Ethos, Starbucks Reserve, and Princi.

According to Starbucks 2020 Financial Report, it has three reportable reporting segments: Americans (including U.S., Canada, Latin America); International
(including China, Japan, Asia Pacific, Europe, Middle East, Africa); Channel Development. For the first two segments, their revenues come from company-operated stores and licensed stores.

2.2. Method

This paper adopts the quantitative and qualitative analysis methods.

Ratio analysis and trend analysis are used for quantitative analysis.

The ratio analysis method is to get some static data from the balance sheet and income statement and then calculate the ratio to directly reflect the financial ability of the enterprise. Thus, financial analysis provides information concerning a firm’s operating performance and financial condition [15].

This information is useful to analyze a firm’s operation and to evaluate the risk and potential returns. According to the development characteristics of the catering industry, this paper mainly analyzes the solvency ability index, turnover ability index, profitability index, and growth ability index of Starbucks [15].

The trend analysis method compares the same index in the financial reports of different periods and directly shows the increase or decrease and the range of changes [16]. Thus, through the trend analysis, we can know the changes in the financial operation of the enterprise and provide help for predicting the future development direction. Furthermore, as the ratio analysis is static data, the trend analysis can analyze the company’s financial situation from a dynamic point of view. Therefore, it can effectively avoid the one-sided analysis results, which will be a supplement for this paper.

SWOT model analyzes are used for qualitative analysis.

SWOT: SWOT analysis was first proposed by H. Weirich of the University of San Francisco in the early 1980s. SWOT analysis is a method of selecting the best business strategy by systematically evaluating various factors of a company’s internal conditions and external environment [16]. S means the company's strengths; W means the company's weaknesses; O means the company's opportunities; T means the company's threats. As an analytical tool, it is used to categorize important environmental factors, both internal and external, to the organization. SWOT analysis has been praised for its simplicity and practicality and has been widely adopted [17]. The contribution of SWOT analysis lies in the use of systems thinking to match these seemingly independent factors with each other for comprehensive analysis, making the formulation of corporate strategic plans more scientific and comprehensive [17]. See Figure 1.

![Figure 1 SWOT analysis](image)

SWOT analysis applies not only to the competitive analysis of a company in the market but also to the internal management analysis of a company. Various factors can be arranged and considered together [18]. The SWOT analysis also allows us to understand the moral quality of the company, the in-depth study of the company's internal operations, the company's professional capabilities, etc. It also contains a comparison with the same industry. This qualitative analysis helps us look at the restaurant industry's impact under the epidemic from a different dimension than quantitative analysis.

3. RESULTS AND DISCUSSION

Based on Starbucks' financial reports in recent 3 years (2018-2020) and other Internet secondary data. We can take quantitative and qualitative analysis to discuss Starbucks to find the advantages and problems of Starbucks. Thus, we come up with a preliminary opinion. Then through discussion, we can continuously revise and add to the preliminary opinion and use it as the final basis for predictive analysis. Quantitative analysis is used to analyze the quantitative characteristics, quantitative relationship, and quantitative changes of Starbucks, which can make the article verifiable and quantify the company's strength to evaluate the company's operational activities and make investment judgment and management suggestions.

Qualitative analysis can yield insights into Starbucks' external industry environment and internal business operations, determine industry chain positions, and analyze competitive advantages to improve the company's earnings growth logic.

3.1. Qualitative Analysis

In the quantitative analysis, according to the characteristics of Starbucks, this paper selects the short-term solvency index, turnover ability index, profitability index, and growth ability index. The solvency index can measure whether an enterprise can survive and develop healthily. The turnover ability index can directly show the liquidity of inventory, measure the utilization efficiency of all the enterprise's assets, and then impact...
the company's purchasing business and inventory management. The profitability index is a direct reflection of the company's profitability and economic strength. Finally, the growth ability index affects the company's future development and the formulation of the company's strategy, but also affects the investment of investors. The above indexes provide fundamental reference content and judgment for investors before investing.

3.1.1 Solvency Capacity Index

From 2018 to 2020, Starbucks' solvency ability had been weakened year by year. In 2018, the current ratio and the quick ratio of Starbucks were 219.8% and 195.2%, respectively, but by the end of 2019, the current ratio and the quick ratio decreased to 91.7% and 66.9% separately. Due to COVID-19's influence, in 2020, Starbucks' current ratio and quick ratios were 106.3% and 85.1%. See Figure 2.

![Figure 2 Current ratio and Quick ratio of Starbucks from 2018 to 2020(%)](image)

3.1.2 Turnover capacity index

Starbucks has a steady turnover capacity. From 2018 to 2020, the inventory of Starbucks account for 5.8%, 8.0%, and 5.3% of the total assets, and the inventory turnover days are 29.0 days, 28.1 days, and 30.5 days separately. Accounts receivable turnover ratios were 6.8%, 5.3%, and 4.8%, and the days of Account receivable turnover days were 11.5 days, 10.8 days, and 13.7 days respectively; The operation cycle were 40.5 days, 38.9 days, and 44.2 days; The total capital turnover ratios were 1.28 times/year, 1.22 times/year and 0.97 times/year. See Figure 3.

![Figure 3 Inventory turnover days and Account receivable turnover days of Starbucks. (days)](image)

3.1.3 Profitability index

Profitability was affected by the epidemic, showing a downward trend. From 2018 to 2020, the gross profit margin of Starbucks had reduced and was affected by the epidemic, which was 29.6%, 28.2%, and 21.5%. However, its net interest rate and Return on Equity (ROE) were greatly affected by the epidemic and faced a significant decline, which was 18.3%, 13.6%, 3.9%, and 136.2%, -142.4%, -13.2% respectively. See Figure 4.

![Figure 4 Gross profit margin and net interest rate of Starbucks from 2018 to 2020. (%)](image)

3.1.4 Growth capacity index

The ability of growth declined. COVID-19 had increased the operating cost of Starbucks. What’s more, Starbucks had expanded its debt scale from 95.1% in 2018 to 126.6% in 2020. At the same time, the outbreak of the epidemic had seriously hindered Starbucks' cash flow. Meanwhile, its cash flow rate had dropped from 210% in 2018 to 21.7% in 2020. During this period, the cash reinvestment ratio also fell sharply, from 55.2% to -1.5%. Nevertheless, we can see that Starbucks had excellent Earning Per Share and Free Cash Flow per Share in 2018. For instance, the Free Cash Flow per Share was almost twice higher than Earning Per Share, which indicated that Starbucks had great flexibility in finances. Later, affected by the epidemic, Starbucks was difficult to operate normally, so its sales revenue decreased. During the period from 2019 to 2020, the Earnings Per Share of Starbucks had reduced.
Moreover, the Free Cash Flow per Share was lower than Earning Per Share, which demonstrates that Starbucks had adopted a large number of credit sales or had a large amount of capital expenditure and investment activities. During this time, the profitability was weak, and the stock investment would be meaningless. Fortunately, at present, they have recovered in the recent 12 months. See Figure 5 & Figure 6.

The results of the quantitative analysis show that Starbucks's solvency, turnover capability, profitability, and growth ability are affected by COVID-19. However, at present, Starbucks still adheres to the expansion strategy, which makes the company overburdened with a debt ratio of 127%. In addition, the total assets turnover rate of Starbucks is 0.83 times per year, which is very slow. Besides, the current ratio is 107.3%, and the quick ratio is 84.2%. Furthermore, if there is a debt dispute, it may lack the ability to clear the debt immediately. Finally, the interest coverage ratio is 3.7 times, which is low in general, facing the risk of stability decline. Besides, the Free Cash Flow per Share is only $0.84, and the financial flexibility of Starbucks is dropping, which leads to the decrease of funds for reinvestment of Starbucks and hinders its sustainable development.

3.2. Qualitative Analysis

Strengths: Starbucks and its suppliers have relations of cooperation that are difficult to break. Starbucks committed to creating a "Starbucks experience" through location selection, design, and decoration of stores and staff training, improving the quality of service. This coffee culture gives Starbucks' coffee premium a good reason to exist. Starbucks holds a high market share, and the masses have a high awareness of the brand. Starbucks had already developed an online delivery take-out channel before COVID-19. Now Starbucks has upgraded its delivery system to alleviate the sharp drop in orders due to out-of-home restrictions. Starbucks' good corporate reputation is their best advertisement. During COVID-19, Starbucks provided several humanistic benefits to employees, such as provides grants of up to $500 for partners experiencing financial hardship [20].

Weakness: Their products are expensive. Although Starbucks is a famous brand in coffee businesses, customers can still transform to other brands. With low switching costs, price and trend can easily affect customers’ choices. In addition, the products of Starbucks are not so differentiated from others and do not compete in quality among all products with similar price ranges. Starbucks also relies on revenue from individual customers, not from collaborations with firms.

Opportunities: Starbucks can expand its product portfolio and products, such as tea and juice products, etc. They are meeting the needs of different customers. Also, they have expansions in Asia, the Middle East, and Africa and expansions of the market to some emerging first-tier cities, such as the current concentration of Starbucks stores in China in the north. Still, the purchasing power of new first-tier cities such as Hangzhou is fully comparable. Market downgrades also reduce fixed costs such as rent. In recent years, Starbucks has focused so much on growth and opening new stores that it has lost communication with its core customers, causing its image and reputation to plummet in some markets, including the United States. In today's COVID-19 environment, Starbucks can enforce corporate ethics and implement people-friendly initiatives to redeem its reputation.

Threats: Unindents, Luckin Coffee, and McDonald's cut into Starbucks' market share so that the competition in the market is more intensive. The competitors of Starbucks are mainly the large coffee chains and some cafes in the street. They provide a similar environment and products as Starbucks to compete with it. Some fast-food shops and convenience stores also sell coffee for customers. In addition, RTD coffees and instant coffees can be considered as a competitor of coffee. Although they fail in providing the same environments and coffee quality as Starbucks, they impact the customers who just won't buy the consume coffee.

Starbucks has suffered a heavy loss during covid-19. Due to the fact that customers could not get to the shops, its turnover was greatly reduced, and more and more rivals in the market have been crowded out.
However, Starbucks still has a strong competitive advantage in terms of its corporate soft power: high market share, strong brand, staunch customer loyalty, favourable corporate ethics, unique services, and products, etc. The company has also carried out several initiatives to mitigate the influence of covid-19. Overall, Starbucks is worth investing in.

4. CONCLUSION

Based on the analysis above, the following conclusions can be drawn:

This paper takes Starbucks as the research object to evaluate the investment of the catering industry under the influence of COVID-19. This paper summarizes the financial situation and operating features of Starbucks from both quantitative and qualitative aspects. The quantitative analysis adopts ratio analysis and trend analysis; the SWOT model is used in qualitative analysis. By quantitative analysis, we understand that Starbucks has a relatively stable turnover capacity, and its solvency and profitability are declining year by year. However, the company still adheres to a positive expansion strategy. In the short term, Starbucks will face heavy debt pressure. This paper reveals that Starbucks is facing great challenges from the internal and external environment through qualitative analysis. However, Starbucks still provides unique coffee culture and environment to persuade customers to pay high prices. Due to Starbucks' high customer brand loyalty, it has a good competitive advantage and reputation in the catering industry. Meanwhile, COVID-19 has ameliorated. If Starbucks can slow down the store expansion and take an effective development strategy simultaneously, Starbucks is worth investing in in the long term.

The catering industry is not only a key area in the prevention and control work of COVID-19 but also the most far-reaching life service industry affected by COVID-19. After the epidemic outbreak, China has issued a series of policies on public health and safety prevention and control, promote consumption, and protect wild animals, which have a significant impact on the development of the catering industry. Meanwhile, the epidemic forces the catering enterprises to adapt to the current needs of public health, brand building, and economic digitalization.

When investors invest, they are except to understand the company's solvency, profitability, or other related financial data, such as the size of sales revenue, the number of investment profits and the level of investment return, etc. Still, also they should measure the current financial situation of the enterprise. For example, whether the company's financial situation is stable, whether the financial structure is reasonable, and to predict the future development trend of the corporation, to provide the basis proofs for investment. Furthermore, the company's enterprise strategy and management mode should be analyzed. For example, Starbucks pays more attention to brand building and emotional experience marketing compared with the traditional catering industry. Besides, it has a set of healthy and complete QSC (quality, service, cleanliness) systems and O2O (online to offline) business models, which are an important force for Starbucks to resist the epidemic and keep sustainable development. Thus, in the post-pandemic era, investors need to refer to the company's profit level, operating income, or other financial data and consider the company's digital construction, brand characteristic construction, and other enterprises' soft power. Moreover, the relevant policies that the government promulgates, market demand, and external environment should be considered.

Overall, Covid-19 has brought tremendous impact and challenges to the global restaurant industry, but it has also created new opportunities for e-commerce development and restaurant industry transformation and upgrading. Our research can provide value analysis guidance for Starbucks and similar companies to conduct corporate strategy analysis and investment analysis from different perspectives in such an unprecedented environment. It helps individual investors how to better select investment targets. And restaurant companies such as Starbucks can draw from this research to realize how to improve their corporate management and development direction to attract more capital. The research of this paper can provide feasible suggestions for the recovery of the restaurant industry and help them mitigate the negative economic impact of covid-19. This paper also provides a guiding direction on whether the world should introduce relevant policies to restore economic globalization and promote economic reforms in the covid-19 environment.

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