Gamestop Corp. (GME) shares are overvalued

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Abstract: This essay explains and illustrates whether GameStop shares, as a typical meme stock, are overvalued. Under the situation of global recession, the share price of GameStop has experienced a rapid increase. Undisputedly, the unexpected change attracts the attention of investing public, which becomes the focal point in the whole financial market immediately.

1. Introduction

GameStop Corporation, an American video game company, is currently the world's largest retail giant of video games and entertainment software. From the beginning of 2014 to the beginning of 2020, GameStop had a declining health, experiencing a long-term downtrend in share price. The price decreased consistently from \$50 to \$3. However, an important turning point emerged after that. In Sep 2020, Ryan Chen (CEO of Chewy) invested a large amount to GameStop and joined the board. His action broke the deadlock over the dying industry, which made people believe the stock of GameStop was undervalued. Then WallStreetBets members pushed the share price up to \$20 in the end of 2020. This unusual increase attracted the attention of hedge funds who deemed the stock of GameStop was overvalued and the share price would decrease immediately. Thus, many hedge funds took the measure of shorting stock. WallStreetBets members were aware of the hedge funds' movement and then triggered short squeeze. Surprisingly, the share price rocketed upwards to \$483 in 28th Jan 2021, reaching the historically highest point. Unfortunately, those hedge funds suffered a year-to-date market-to-market loss in GameStop of \$19.75 billion due to the wrong prediction. It could be argued that the collective of small players won a temporary victory over the behemoths in Wall Street. However, good days never, the share price plummeted to \$50 during a week. The dramatic decline could be attributed to the restriction policy implemented by a famous free-trading App – Robinhood. It decided to restrict the purchase of GameStop shares when the share price was still considerable elevated. Robinhood's action was construed as a protection measure for the billionaire hedge-funds managers at expense of the interest of GameStop investors. On the other hand, the unsustainable bullish sentiment on the stock of GameStop also contributed to the decrease of the share price. However, there was an unexpectedly second increase of the stock price in Feb 2021. The stock price eventually ascended to \$200 with fluctuations recently. According to its history, we conclude GME stock as a meme stock which is defined as the stock gone viral online. Meme stocks are likely to appeal retail investors, because the companies' value is mainly rooted in social sentiment rather than in the companies' actual valuation or business performance. GME stock achieves prominence through hype on Reddit. Given this volatile journey, and social influence from forums on sites, it arouses people's reflection on actual valuation of GameStop. In this essay, I would like to focus on stock valuation, fundamentals, management, as well as behavioral finance to determine whether GameStop is over or undervalued. I will argue that the stock is overvalued.

2. Quantitative Approach

2.1 Stock Valuation – Comparable Company Analysis

As the rapid development of electronic industry, majority of gaming companies operate the business of both manufacturing and selling. In contrast, GameStop only focuses on selling games. On the other hand, there is no advantage for GameStop as a retailer company, because most of retailer companies expand their service far beyond only one sector. Therefore, GameStop has a relatively obsolete mode of business and few companies have the similar business mode of GameStop. As applying comparable company approach to analyze the stock valuation of GameStop, I choose two group of companies – consumer electronics retailer group and digital gaming group. Retailer group involves Best Buy Co., Amazon, and Conn's Inc. All the companies are global famous retailers and lead the consumer electronic e-commerce market. Gaming group involves Sony, Sega, and Nintendo. All the companies are top contender in video game market and devoted to developing games.

Table.1. Illustrates the comparison of retailer peers.

Company Name	EV/Revenue	P/B Ratio
Best Buy	0.5x	6.1x
Amazon	3.9x	14.9x
Conn's Inc	1.0x	1.1x
Average	1.8x	7.4x
GameStop	2.4x	7.9x

Key Statistics	EV	Share Price	Revenue	Book Value/Share
GameStop	13.593B	193.84	5.587B	24.95

	Implied EV	Implied Share Price
Applicable company figure	10.057B	184.63

Table 1 demonstrates the implied enterprise value and implied share price with multiplies. Obviously, we can tell that both enterprise value and share price are larger than implied figures. Therefore, GameStop is supposed to be overvalued.

Table.2. Illustrates the digital gaming peers.

Company Name	EV/Revenue	P/B Ratio
Sony	1.7x	2.2x
Sega	0.7x	1.3x
Nintendo	2.6x	3.5x
Avergae	1.7x	2.3x
GameStop	2.4x	7.9x

	EV	Share Price	Revenue	Book Value/Share
GameStop	13.593B	193.84	5.587B	24.95

	Implied EV	Implied Share Price
Applicable company figure	9.498B	57.39

Table 2 demonstrates the implied enterprise value and implied share price with multiplies. Similarly, implied enterprise value and implied share price are far below the figures of GameStop. Therefore, it underlines the overvaluation of GameStop.

Although both groups of companies are not very appropriate as comparable companies, they infer the expected business mode of GameStop. From my point of view, GameStop badly need transformation of their business for their long-run development in the market. Apparently, its share price has not reflected this important sign. Therefore, I reckon that GameStop is overvalued.

2.2 Fundamentals

Fundamentals also provide a method to set the financial value of a company. Firstly, the P/E ratios relate the capital value of the shares to current level of earnings, which are regarded as an appropriate measure of market confidence in the future of the business. The P/E ratio of GameStop is negative, which demonstrates a net loss of the company and a sign of financial trouble. People have little confidence in the future of GameStop. Secondly, the Price to Sale ratios illustrate how much investors are willing to pay for every dollar of stock sold, which does not take earnings into account. Therefore, it offers a suitable measure for sizing up stocks to GameStop with negative P/E ratio. A higher P/S ratio of GameStop in comparison to average of the technology retailers could suggest the overvaluation of the stock. Thirdly, the Price to Book ratios assess the market valuation of the company related to the book value. Return on Equity is a measure of company's financial performance associated with net income and shareholders' equity. GameStop had a higher P/B ratio in comparison to the peer companies. Due to negative earnings, ROE of GameStop is negative. Therefore, a combination of a low ROE and a high P/B ratio could infer an overvalued growth stock of GameStop. Fourthly, the Price to Free Cash Flow is a stock valuation index that measures the market capitalization against free cash flow. The P/FCF ratio of GameStop is higher than peer companies, which indicates its share price is relatively higher than its free cash flow. Therefore, it could imply the overvaluation of GameStop's stock. At the same time, a relatively higher Price to Cash Flow ratio of GameStop also underlines the overvaluation of the stock.

3. Qualitative Approach

3.1 Management

Not only should we focus on the quantitative analysis, but also it is worth paying attention to qualitative information. According to Chicago Tribune report, GameStop has a bad reputation on the management domain. Employees in GameStop commented that people are more concerned about rising share price rather than the squeeze from employees. Many employees are forced to complete the work of 2-3 persons in a day. Majority of staffs do not have break during the work and spare no effort to achieve the demanding requirements. Manager attach less importance to their employees and ignore the advocation from the workers, which are definitely harmful for the development. Even though soaring share price saves its dying business, GameStop's resurgence has not reach to the fundamental employees. In my opinion, the managers in GameStop are not qualified and therefore, GameStop is overvalued.

4. Behavioral Finance

Besides quantitative and qualitative perspectives, we also can consider the role of behavioral finance exerted in the question. Behavioral finance is defined as the biased behavior in the market of irrational participants. And majority of irrational behavior results from people's psychological factors. There are three important types of market psychology – overconfidence, herding effect, and Gambler's fallacy, which influence people's investing decisions.

Firstly, the concept of overconfidence in finance was brought by Daniel Kahneman who is an Israeli psychologist and economist notable for his work on behavioral economics. In the interview with The Guardian, Kahneman confided that overconfidence is the significant source of terrible market decision-making. It constructs the illusion to many investors that they are able to seize the opportunity and time the market. However, in an efficient market, it is impossible to consistently make abnormal returns on the basis of information. In other words, making a large amount of money consistently should be explained by chance. For meme stock, overconfidence is likely to cause that people overestimate their ability to illustrate rapid change in stock price. Therefore, GameStop's share price has not been valued properly, due to overconfidence of investors.

Secondly, as the stock has gone viral online, meme stock has an intimate connection with herding effect in the network. The powerful internet, such as WellStreetBets, makes a significant contribution to the formation of groupthink in financial market. Investors on WellStreetBets not only has made a concerted effort to pile into tremendous number of stocks of a declining company, but also manage to magnify the losses of short-sellers and hedge funds. Therefore, we can tell that the share price of GameStop reflects an irrational collective followers' power rather than the actual valuation of the company.

Thirdly, Gambler's fallacy is an illogical reasoning which illustrates the thought that the results of a series of independent events exist autocorrelation to some extent. For instance, good weather for days may imply large possibility of bad weather in the following days. It can also be projected to GameStop's stock. Long-time depressed share price can infer rebound in the following period. This absurd belief can be concluded as “Probabilistic regression” theory. Inevitably, the theory that have no relation with the company’s performance will distort its actual value. Therefore, all the above psychological factors on meme stock emphasize the overvaluation of GameStop.

5. Summary

Overall, through aspects of stock valuation, fundamental analysis, management quality, and behavioral finance, GameStop is supposed to be overvalued. From my perspective, its obsolete business mode is the root cause of the overvaluation. GameStop should keep pace with the development in the industry in order to survive and stay prosper in the market. Besides, managers’ abominable performance exacerbates the situation of GameStop. The last but not the least, for investors, people should make effort to limit biased behaviors and to follow the investing theory with scientific basis.

References

[1] Information on: https://www.chicagotribune.com/business/ct-sns-gamestop-employees-tone-deaf-trading-20210128-c3clzt26xfc7thev6u5wrpfrze-story.html

[2] Information on: https://finbox.com/NASDAQGS:AAPL/explorer

[3] Information on: https://vise.com/blog/meme-stocks-are-the-latest-reminder-of-market-psychology