

Research on the Impact of Corona Virus in the Perspective of Value Investing — Using ViacomCBS Inc as an Example

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Abstract: Now under the prevalence of corona virus, the economy is facing unprecedented challenges. Different industries and corporations are suffering from several consequences due to the pandemic and the lockdown. While the pandemic influenced the economy in many aspects, few researches have been conducted about its implications. More specifically, few researchers have been conducted about media companies under the scope of value investing strategy. This paper uses ViacomCBS Inc as the target, corona virus as the background, quantitative analysis (Price Earnings ratio, EV/EBITDA ratio, Gross Profit to Asset ratio, Growth rate, and Dividend Yield) as the methodology, to analyze the implication to corporations. Conclusions are listed as followings: first, the coronavirus has a noticeable negative impact on media companies; second, the negative effects can vary in different business units, and a multidimensional business strategy can effectively offset the risk; third, the degree of the impact can be analyzed from its price, growth rate, profitability, and dividends. This paper contributed to filling up the gaps in the exploratory field of current studies, and in practice provides investors, corporations, and governments insight in adopting the adversity generated by the pandemic.

1. Introduction

Under the impact of the COVID-19 virus, the modern world and its economy face great challenges and uncertainties that are unprecedented. While individuals struggle to overcome the adversity, corporations and investors suffer from the consequences of the pandemic. Under a macro scope, it is noticeable how economic stagnated due to the lockdown and in response the decreasing on economic activities. As previous experience suggests, global GDP decreases under pandemic. In the example of the 1918 Influenza pandemic, the global GDP was reduced by about 5%, and about 60% of the reduction resulted directly from the effects of avoiding infection [1]. Looking at the influences on a micro-scale, individual investors and corporations are facing unmet risks and difficulties, such as diminished sales volumes and life dangers. People are all suffering both mentally and physically through the pandemic; business activities got restricted in many aspects, income decreases for almost everyone in the world. On the macro scale, factors such as obstruction from the government play an important role. To maintain and control the spread of the virus, many policies were enacted that undermines the vitality of the economy. In addition, those policies are constantly changing, which leaves corporations no room to adopt. To control the spread of the virus, governments around the world provisioned policies regarding multiple aspects such as quarantine, curfew, lockdown, halting down businesses, etc. While the policies undermine economic performances, the innate uncertainty within these policies is affecting the economy negatively. Investors are now facing new risks that have yet been considered and analyzed, which leads to higher-risk projects or low investment activities. While the coronavirus affects human society more directly and in a broader scope, the significance of its effect on investment activities and corporations became more discernible. Such an effect results in a furthermore negative impact on corporation financial levels. Many companies are now paying the extra expense to maintain their operation under the pandemic while experiencing fewer customers than usual. The decrease in investment is pushing the company to a further

disadvantageous position. However, though the pandemic generally influences investment and corporations negatively, opportunities come along with adversity. Media companies, different from traditional companies that operate offline, the hybrid business type may experience different impact and opportunity that is relatively unique to the market.

Value investing, first introduced by David Dodd and Benjamin Graham in their book *Security Analysis*, has become a major strategy investor exerts now days. Dodd and Graham recommended to move beyond the reliance on simple fundamental ratios to gain a better understanding of a security's true value. Many successful investors use value investing strategy when picking stocks and creating the stock portfolio, for example, Warren Buffet is a loyal adherent of value investing, he once said that "its far better to buy a wonderful company at a fair price, than a fair company at a wonderful price". As this quote indicates, value investing strategy is looking for stocks that are undervalued by the market by focuses on the intrinsic value of the company by analyzing its financial information. Recent studies on value investing demonstrates an optimistic attitude toward the application of value investing strategy, and the demonstration can be interpreting from both china and global. As recent research in China proceeds, researchers noted the feasibility of stock analysis practice without contradicting the efficient market theory under the value investing framework [2]. Globally, analyzing and forecasting fundamental data in order to evaluate the stocks shows advantages compared to forecasting price directly [3]. Along with the expansion of acceptance of value investing strategy, though doubts regarding its feasibility and theoretical disputes have been brought up, the latest research remains confident about the effectiveness of value investing and recognizes its fundamental principle. Based on the founding of Nettayanun, Sampan, using value investing measures such as PE successfully predicts the performance of the stock, which the stocks with lower value measures such as PE, PB, CAPE3, and CAPE5 outperform the market [4]. Moreover, Jon Medved concluded in his paper that the principle or an intellectual framework of looking at the intrinsic value of a stock or a portfolio of stocks is critical and should not be neglected. The practice of value investing has a reasonable base to outperform relevant benchmarks [5]. Recent studies on investment behaviors also found that investors would prefer more of a value investing strategy over a growth investment strategy if macroeconomic adversity were experienced, for example, the great depression [6]. In the end, value investing premium is proven to be existed in the U.S [7], and value investing strategy is still proven to be a valuable method of developing investing portfolios, and its fundamental idea remains sound and practical.

To sum up, the value investing strategy has proven its feasibility as a practical investment strategy under several market environments. However, little research has been conducted based on the current coronavirus pandemic background, which leaves a blank on the practicability of value investing. This paper has three main contributions. First, it brought the concept of value investing in testing under a new environment, which complements the research of value investing in different circumstances. Second, this paper targeted a specific company from a certain area that has yet been studied under the pandemic. It provides future researchers an insight when conducting relevant researches. Third, this paper provides individual investors and corporations a valuable suggestion regarding investment strategies and corporation operations.

2. Data And Method

2.1 Data

The data collected for this research is selected from ViacomCBS. ViacomCBS is an American international mass media company formed by the second incarnation of Viacom and CBS Corporation. The data selected and used in this paper is from ViacomCBS's financial statements, including balance sheet, income statement, and stock statements from 2015 to the third quarter of 2020, which can be found from its 10K and 10Q. Data collected and used in this research are presented in Table 1.

Table 1. ViacomCBS financial data from 2015 to 2020Q3 [8]

year	at	cash	dbt	so	dps	ebitda	eps	gpf	rev	prc
2020Q3	51425	3086	19703	618	0.94	1057	1	9841	25931	29.53
2020Q2	51188	2288	19704	617	0.87	1410	0.78	10198	26513	22.56
2020Q1	49045	589	18005	616	0.81	1030	0.84	10341	27381	15.99
2019	49519	632	18002	617	0.74	5531	5.3	10589	27812	40.13
2018	21859	322	18100	621	0.68	3271	5.14	11333	14514	47
2017	20843	285	9464	647	0.67	3042	3.22	11052	13692	53.54
2016	24238	598	8902	448	0.61	3086	3.46	5210	13166	58.42
2015	23765	323	8226	489	0.54	3107	2.87	4760	13886	44

2.2 Method

To illustrate the impact of coronavirus on corporations and especially on media companies under the view of Value Investing, this paper uses quantitative analyzes, which include value investing indexes. The value investing measures used in this research are shown as follows.

1) Price/Earning ratio: Price/Earning ratio is a ratio of a company's share price to the company's earnings per share. It can be used to analyze the relative value of a company and compare to other firms or historical data. In addition, P/E ratio has shown to be negatively related to stock returns, whereas the market performs overall better when P/E ratio are low [9].

2) Enterprise Value: Market Capitalization + Market Value of Debt - Cash and Equivalence. Enterprise Value is the measure of a company's total value. It includes the market value of a firm and its long-term and short-term debt, which reflects a more veritable value of a firm than Market Capitalization.

3) EV/EBITDA ratio: Enterprise Value/Earnings before Interest, Tax, Depreciation, and Amortization ratio. EV/EBITDA ratio is a method used when measuring the value of a company. It is constantly used as an alternative to the Price/Earning ratio.

4) Gross Profit to Asset ratio: Gross Profit/Asset. Gross Profit to Asset Ratio is a ratio used to measure profitability. It measures in a sense how much profit a firm can generate in its given asset. The GP/A ratio appears to be the most effective measure of basic profitably in predicting cross-sections of expected return [10].

5) Dividend Yield: Annual Dividend per Share/Price per Share. Dividend Yield measures in the percentage of how much dividend companies pay out each year relative to the stock price. It is a common method to understand dividend paid and to compare with other firms.

3. Results And Discussion

This paper analyzed ViacomCBS's stock and corporation performance over the past five years in four commonly used value investing measures, which are price (P/E, EV/EBITDA), profitability(GP/A), growth rate(sales growth, EBITDA growth), and dividend(dividend yield); in order to demonstrate the effect on the corporation's overall performance, and evaluating the applicability of value investing strategy under corona virus.

3.1 Less favorable in price

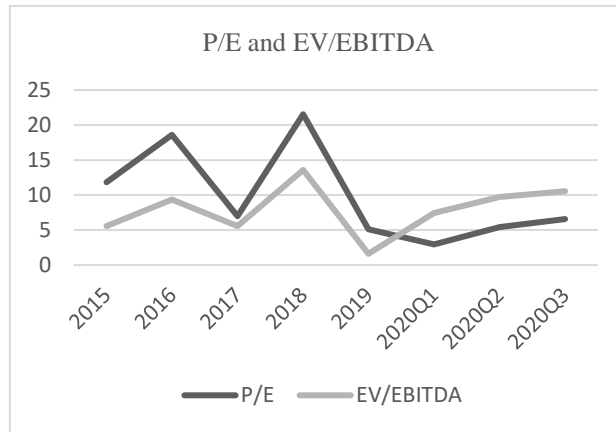


Figure 1. VIACOMCBS P/E ratio and EV/EBITDA ratio from 2015 to 2019

As Figure 1 shows, both the P/E and EV/EBITDA fluctuated from 2015 to 2017, after dropping in 2017, during 2018 to 2019 the value increases then decreases drastically, and increases again at 2020.

While a higher value of P/E and EV/EBITDA indicates less preferable by the market, ViacomCBS appears to be inconsistent in the past five years. After the sudden drop in 2019, which may be caused by the emergence of the company. ViacomCBS's market performance again appears to be unfavorable without cushion, which is likely resulted from the decrease in sales and investments due to the pandemic.

3.2 Diminishing profitability

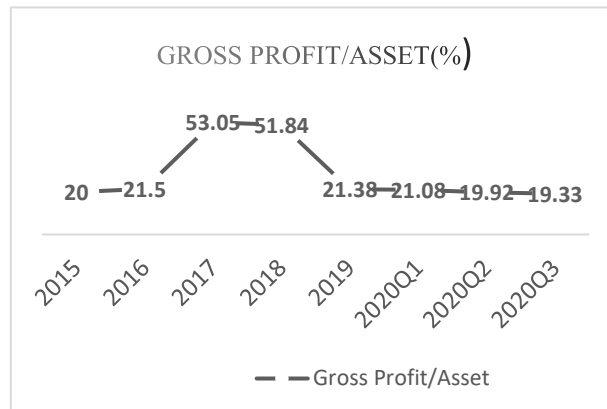


Figure 2. VIACOMCBS Gross profit/Asset ratio from 2015 to 2020Q3

As seen in Figure 2, after an abnormal rise in 2017 and 2018, the GP/A dropped back to around 20% in 2019, and slowly decreasing in 2020.

Though experiencing a sudden rise of GP/A in 2017 and 2018 caused by the increment of gross profit, it later went back to the standard value due to the following bump of assets. In 2020 ViacomCBS's GP/A has decreased to the lowest within the five years, demonstrated the impact of the pandemic on its profitability.

3.3 Negative growth in sales and EBITDA

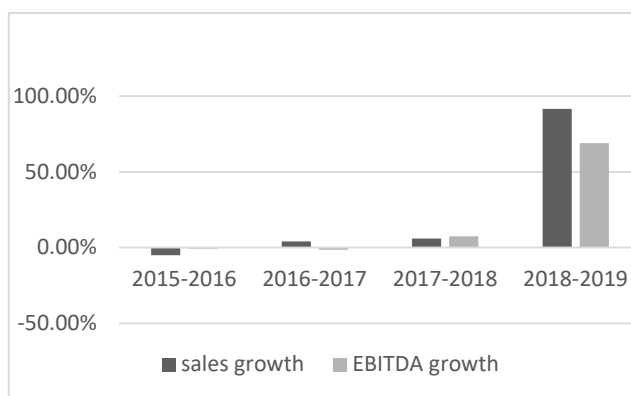


Figure 3. VIACOMCBS growth rate in sales and EBITDA from 2015 to 2019

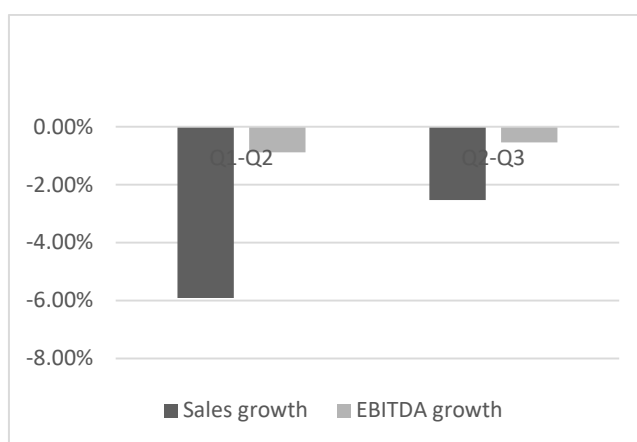


Figure 4. VIACOMCBS growth rate in sales and EBITDA from 2020-Q1 to 2020Q3

As Figure 3 and Figure 4 indicate, while growing consistently from 2016 to 2018, and a swingeing growth at 2019, ViacomCBS's sales meet its turning point at 2020, decreases gradually from Quarter1 to Quarter3. Similarly for EBITDA, the growth rate from 2015 to 2020 reacted identically with sales in a smaller proportion.

As the opposite of the growing trend in its sales volume and EV/EBITDA, in 2020 ViacomCBS appears to be growing negatively, it is reasonable to suggest such negative growth is the direct manifestation of the adversity caused by the corona virus.

3.4 Increasing dividends

Table 2. VIACOMCBS dividend yield from 2015 to 2019

Year	Dividend Yield
2015	1.23%
2016	1.04%
2017	1.25%
2018	1.44%
2019	1.86%
2020Q1	5.05%
2020Q2	3.87%
2020Q3	3.18%

By looking at Table 2, the dividend yield is growing consistently from 2016 to 2019, after reaching its climax at 2020 Quarter1, dropped back to a lower level at Quarter3 while remaining higher than past 5 years.

The counterintuitive growth in dividend yield likely indicates the following. First, ViacomCBS still remains sound in its excesses of cash and operations, and second, ViacomCBS lacks investment opportunities and subsequently returns its excess cash back to shareholders.

4. Conclusion

Based on the results of the research, we can conclude that the negative impact of the corona virus dealt with ViacomCBS' performance is perceptible, though not drastic. Notwithstanding the limitation of the range of data selected, which could be argued that the result may be influenced by other factors such as managerial decisions or other economic factors, the results present ViacomCBS' financial performance in a comprehensive way that is still accountable for measuring the impact of the pandemic at a relatively reliable level. The price value all presented to be increasing in an unfavorable direction after the sudden drop in 2019. Similar to the slight decrease in the GP/A ratio at 2020, both negative results can be partly explained by the decreasing sales volume, which complies with the macroeconomic trend. Conversely, dividend yields appear to be increasing drastically at the beginning of 2020, though dropped back, remains higher than the past five years. Overall, the value investing viewpoint in a corporation's price, profitability, growth rate, and dividend yield presents to be consistent with the overall trend of market and economy, and demonstrated an effectiveness in measuring the impact of the pandemic. To sum up, though experiencing a negative impact from the pandemic, ViacomCBS stays relatively stable in its profitability and overall performance. This phenomenon likely results through its multifarious business strategy, in which it contains multiple online and offline business units that offset the negative impact of the adversity.

This paper's contribution can be divided into two aspects, experimental and practicability. For its experimental aspect, there are three major contributions. Firstly, it contributed to the complement of the exploratory research of value investing strategy under a unique background. As a fundamental investing methodology widely used by investors worldwide, a value investing strategy was exerted in this paper to generate the results and measure the impact of coronavirus on corporations, which contributes to future research in the same field. Secondly, the research expanded the study field under the pandemic background, filled up the gap on the research of Media company's, and complemented the range of applicability of value investing methods. Thirdly, the paper contributes to the field in its target selected. With its unique quality of Media company and multidimensional business model, the study conducted on ViacomCBS fills up a gap in the field and provides researchers insights to further the research on how its uniqueness related and reacted to the impact of outside forces. In this paper, the pandemic.

For the practicability, its contributions can also be seen in three directions. First, it may guide the individual investors through their investment strategies. As uncertainty rises along with the pandemic, investment markets are now facing great challenges. Analyzing the corporation's impact can provide investors a direction in alternating and adjusting their investment strategies. Second, it provides corporations insights on adjusting their business strategy to overcome adversity. As the paper indicates, the multifarious business model proves its feasibility in confining the pandemic's risk, which decreases further loss. Third, it supplements the government with information that may help with its future policymaking and implementing. The experiment results indicated several factors that affect the performance of the corporation, which provides future policy penetration points in aiding the economy.

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