Stock Picking Under COVID-19 in Context of Indicators

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Abstract. The capital market has changed a lot because of COVID-19, and there are three types of firms that grow fastest during this period. Thereinto, the most significant one is the pharmaceutical industry. In this specific period, investors need to be more careful when they are choosing stocks. This paper is focused on picking stocks based on value, return, profitability, and payout four aspects. For these four aspects, some data needs to be found and compared, i.e., P/E ratio, revenue growth rate, gross profit, gross margin, asset turnover, GP/A, dividend per share, and dividend yield. For the result of stock picking, JOHNSON &JOHNSON is a very fitness choice now. P/E is low for JNJ and it may not be overvalued, the gross margin for the company is also high with high-level profitability. The financial condition of JNJ is stable and always in a positive trend. COVID-19 caused a bad economic situation, investors have been greatly negatively affected by the situation. These results shed light on guiding investors to avoid losses and gain as much as possible.

Keywords: Stock selecting; COVID-19; Valued; Trend.

1. Introduction

In the latest two years, the biggest impact on the capital market should be COVID-19. In the early days of COVID-19, the global stock market has been seriously negatively affected and there has been a sharp decline in the short term. As governments respond in time and the demand for pharmaceuticals and biotech has grown significantly, the capital market's condition has already improved. However, not all industries can recover smoothly. Many industries (notably aerospace, air and travel, banking, insurance, and oil and gas) are too hard to return to the condition before the pandemic. For the global stock market, there are three different types of companies that can develop the most [1]. First, under the influence of a pandemic, people cannot meet each other in person. The fastest growing firm should be online meeting companies. Zoom, as a typical example, had 10 million daily meeting participants in December 2019, but by April 2020, that number had risen to over 300 million [2]. The online meeting industry will keep developing for a long period even if the pandemic was disappeared. This is a new trend; online meeting platforms change human life. Second, the streaming companies (e.g., Netflix) have developed rapidly nowadays. Beginning in 2020, most public places of entertainment are closed. People are finding entertainment which they can do at home. The combined theatrical and home and mobile market were $36.8 billion in 2021, surpassing the pre-Covid figure of $36.1 billion in 2019.[3] This is represent the unprecedented opportunity the pandemic has brought to streaming firm. For the last type, Under the pandemic, the fastest growing is the pharmaceutical and medical healthcare industries. Because of COVID-19, There are more patients in the hospital, so the demand for medical equipment increases a lot. The research and development of vaccines are very urgent. The companies in the healthcare industry are already thinking about how to get win in this war on a vaccine. For example, JOHNSON&JOHNSON. The J&J vaccine is the first vaccine approved in the U.S. for a single dose. The company's scientific research results have greatly helped the United States control the spread of the disease in the country [4]. At this stage, the economic situation is not stable enough, so the choice of an investment target requires more care. As the result, the research of stock picking is becoming more important. A stock pick is when an analyst or investor uses a systematic form of analysis to conclude that a particular stock will make a good investment and, therefore, should be added to their portfolio [5].

Stock picking is a very complex process and there are various factors that need to be considered. On the other hand, nobody can make sure the future trend of a stock, and the result of picking cannot be absolutely accurate. The economic situation is changing rapidly, investment targets also should be adjusted flexibly [6]. When an investor is selecting stock, they need to know what kind of trader they are, which is the easiest and most basic step. There are three questions for stock picking: the kinds of stocks that investors want to invest in; the characteristics that investors want their stocks to have and the purpose that investors want their stock to achieve [7]. Through these three questions, analysis of the data from various perspectives, including current and projected profitability; asset utilization; capital structure; earnings momentum, and intrinsic value. These are the statements of adjusting current operating conditions and future prospects. For picking up stocks, investors are always estimating trends and whether their spending and returns match reasonable, key indicators (e.g., EPS, P/E, and P/B) can show the investors if they paid a reasonable price for the stock [8]. Based on the criteria for selecting value stocks from Benjamin Graham, financial leverage and dividends are cannot be ignored eighter. They are testing sustainability and the ability to help investors to create a passive income [9]. The beta premium is used if the risk and expected return should be judged in a portfolio. From the beta premium, the relationship between the expected market return and the risk-free rate will be shown [10].

2. Data & Method

As a member of the fastest growing industry, JOHNSON&JOHNSON is a company that is engaged in the research, development, and sales of a range of products in the health care industry. Its main business includes pharmaceutical and medical Devices. JOHNSON & JOHNSON has a pivotal position in the industry because of its strong brand influence. JOHNSON & JOHNSON (JNJ) has been selected from the US stock market because of its excellent performance in the past five years. The company will be analyzed in valuation, growth, profitability, and payout.

The stock of JNJ is selected from 5145 companies and is based on the data from 2015 to 2021, which is collected from SEC. There are many indicators are used through the process of selecting. "prcc_f" stands for the price of the stock; "COGS" means the cost of goods sold; "bkvlps" means book value; "P/E" stands for price-earnings ratio; "P/B" stands for price-to-book ratio. "revt" stands for revenue; "epsfx" stands for earning per share; "ni" stand for net income; "at" means asset total; "revt gr" stands for revenue growth; "GP/A" means gross profit per asset; "csho" means common share outstanding; "dvc" means dividend(common). The formulae that will be included in the analysis are:

$$P/E = price/EPS \tag{1}$$

$$P/B = price/bkvlps \tag{2}$$

$$Revenue\ growth\ rate = \ revt(year1) - revt(year2)/revt(year1) \tag{3}$$

$$Gross\ profit = \ revt/COGS \tag{4}$$

$$Gross\ margin = \ gross\ profit/revt \tag{5}$$

$$GP/A = \ gross\ profit/\ at \tag{6}$$

$$Asset\ turnover = revt/\ at \tag{7}$$

$$Dividend\ per\ share = dvs/csho \tag{8}$$

$$1Dividend\ yield = \ dividend\ per\ share/\ price \tag{9}$$

For the first step of the selection, one needs to remove companies with incomplete or invalid data. Next, the firm should be determined. The first step of picking a stock is choosing a representative company in several industries and comparing its general condition, laying a general direction for the stock selection. After focusing on the pharmaceutical firm, then one computes the valuation of the target companies. To adjust if the valuation of a company is reasonable or not, P/E and P/B are the main metrics. In the data from SEC, the EPS has already been provided and it can be used in getting P/E and P/B. In this step, the companies with a negative P/E ratio should be removed, which is invalid data. Their values determine whether a company's share price is overvalued or undervalued, and then determine if a company has more appreciation space. Hence, P/E and P/B can also help us to predict the movement of stock value. The companies with very high P/E will be eliminated first because investing in these companies is too risky.

Subsequently, the selection will be adopted based on growth and asset use efficiency, also delete the companies always have negative growth rates and asset turnover. This kind of company can never be chosen, i.e., the analysis is not meaningful at all. The same step for profitability and the companies with a positive trend of profitability should be preferred, it is even more important than the high value of profitability. The last date that should be computed is the payout. Some companies may have no dividends, those who have are certainly better than those who don't. For dividend yield, the trend is also more important than value. The stock should be chosen if the dividend is increasing in the latest years. When one selects a stock, it is necessary to pay more attention to the potential of the stock but not its current performance of it. After locking in one stock, it needs to make a side-by-side comparison of different/ companies in the same industry. These companies may have their strengths, but the future development trend is always the most important criterion, so pay more attention to whether a stock's data is consistently trending upwards, or it can be recovered after a decline.

3. Emprical analysis

After removing the stocks with invalid P/E and zero P/E, there just have 5096 stocks left. The P/E of JNJ is 21.90 in 2021, it is in the second last quintile of the US stock market, which means it is lower than 60% of stocks in the market. It is lower than the average positive P/E in 2021 of the US stock market, which is 48.76. Although it is 27.99% higher than the median P/E in 2021. As a healthcare company, JNJ is already a valued stock. Compare with the firm of online meeting and streaming services, healthcare is already valued. Zoom, as the representative of the online meeting firm, has a P/E ratio of 34.28 in 2021; Netflix, as a representative of the streaming service firm has a P/E of 53.59 in 2021, they are all lower than then then the P/E of JNJ. It can be seen that these two industries are still immature and still developing. In this case, its future is still uncertain. Investors may have more returns from this kind of stock, but they also should take more risk.

JNJ has a good performance in growth although its P/E is not that high, which is lower than the average value of the US market. The revenue growth rate is keeping positive in the past five years. It indicates that the company has successfully retained customers and can work with customers for a long time. Meanwhile, develop more potential customers. Especially from 2020 to 2021, there is a large growth in revenue, from 0.64% to 13.55%, which is a 2017.18% growth compared to the revenue growth rate between 2018 and 2019. COVID-19 may be the biggest reason to help a pharmaceutical company achieve huge growth this year. JNJ's growth in revenue always comes with the growth of both profit and EPS, so the growth of JNJ should be sustainable.

For profitability, JNJ even has a better performance. In the past five years, except there is a slight decline in 2020, gross profit has always been on an upward trend. The gross margin is 76.23% in 2021 and it is very stable in the past five years. In 2021, the gross margin of 76.23% is 44.67% higher than the average positive gross margin in the US stock market. In 2021, the profitability of JNJ is in the first quintile of the US stock market. The asset turnover is 51.52% in 2021, which is in the third quintile of asset turnover in 2021 in the US stock market. The median asset turnover of the US stock market is 41.58%, that in JNJ is 23.91% higher than it. The GP/Asset of JNJ is 39.27% in 2021, which is in the top quintile of the US market. The GP/A in the past five years are also very stable, which is between 35-40. This means JNJ can use their asset efficiently, and they are indicative of their products. It shows the investors that JNJ is a competitive company. The profitability can be sustainable and even grow in the future.

Based on the data of the past five years, JNJ has been increasing its dividend for the past five years. In 2021, the dividend yield of JNJ is 2.45%, which is higher than 50% of the companies that pay dividends in the US market, but it is lower than the mean dividend yield of the companies which pay dividends in the US stock market in 2021, which is 3.73%. The dividend payout ratio is 53.73%, which is a quite healthy payout ratio, which means JNJ will have a sustainable dividend in the future.

The competitors of JNJ are Merck, Lilly, Pfizer, and AstraZeneca. After the analysis of the competitors base on their valuation, growth, profitability, and payout, JNJ is still the most comprehensive company. Except Pfizer and Merck have a very low P/E of around 15, the others are all higher than JNJ. In these competitors, Pfizer, Merck, and JNJ have the lowest possibility of being undervalued. Lilly and Astrazeneca's P/E is so high, which is 45.13 and 1456.25 in 2021, but it is normal for the pharmaceutical companies under pandemic. JNJ and Merck are the only two companies that have had a positive revenue growth rate in the past five years. That means they have the best operational condition, and the revenue of these two companies is always increasing in these years. Most of these competitors' revenue has a dramatic growth during 2019 and 2020, which is the result of COVID-19. This kind of growth can not be sustainable if the world is getting into a post-pandemic period. The most revenue of Merck is from the cancer drug, i.e., keyturda. As Merck's flagship product, its sales have been growing steadily. In 2019, the FDA approved the drug for eight new or expanded uses. Also in 2019, Merck's growth revenue became the highest in the past five years, which is 10.75%. This value is 98.55% higher than the value in 2018. The growth can be sustainable in the future. For JNJ, the company's business is more diverse. JNJ's business includes Pharmaceuticals, medical equipment, daily necessities, and so on. The revenue can always be controlled because its revenue is not lowered by a single sector downturn. For the same reason, JNJ has a huge cost of goods sold. As a result, the average gross margin of JNJ is the lowest among these five companies, which is 75.21%. The difference between them is not large. For example, the cost of goods sold by JNJ is 54.3% higher than Merk, but the gross margin of JNJ is just 5.46% lower than Merk. The average asset turnover of JNJ from 2015-2021 is 50.88%, and the cost of research and development of the new drag is very high, so the asset is always been over-invested. As shown in Fig. 1, JNJ has the second high asset turnover among its competitors, so that means JNJ is an efficient company. As illustrated in Fig. 2, JNJ's efficiency is the most stable one. For payout, JNJ has the highest payout ability among these five companies. Beisdes, JNJ is the only company that has a positive trend between 2020 to 2021. The average dividend per share of JNJ is the highest (as depicted in Fig. 3). Investors can get the highest passive income if they choose JNJ.

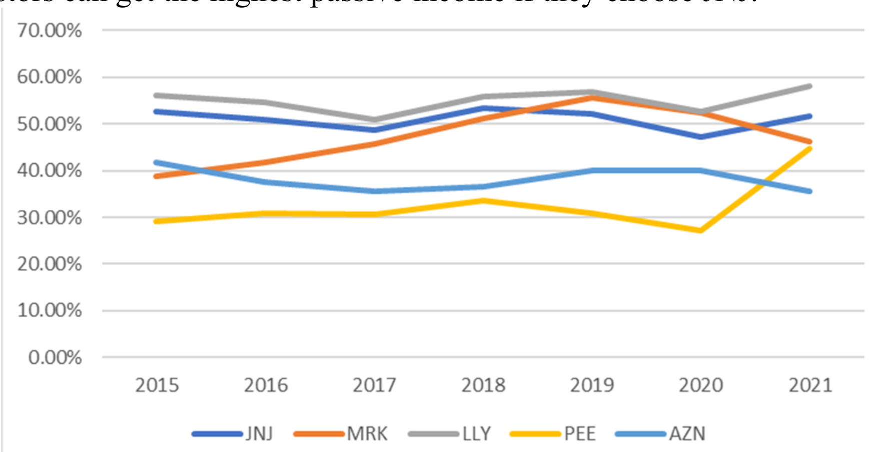

Fig. 1 Asset Turnover of the five companies from 2015 to 2021.

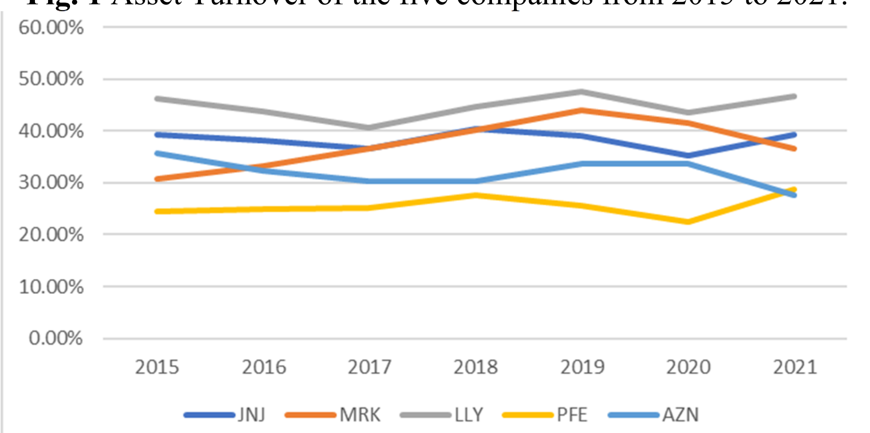

Fig. 2 GP/A of the five companies from2015 to 2021.

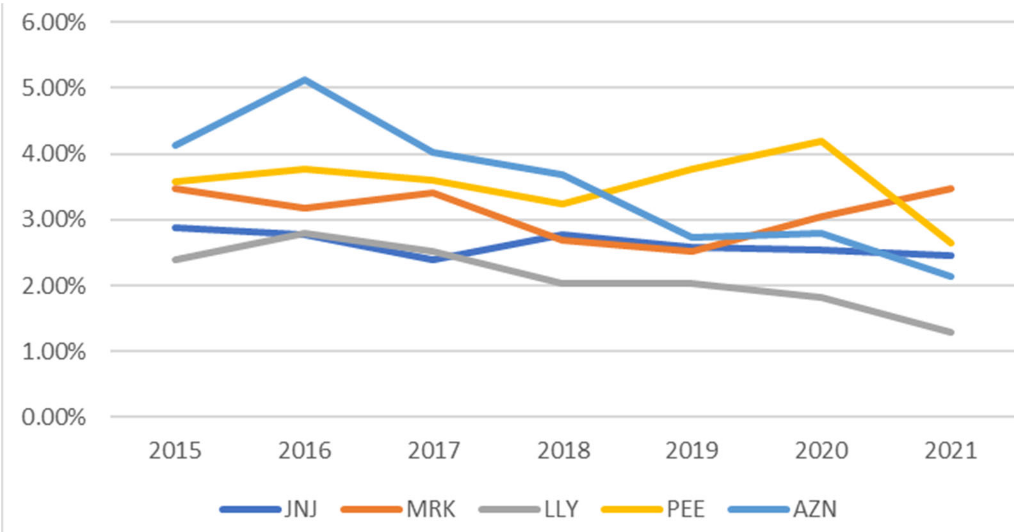

Fig. 3 Dividend Yield of the five companies from 2015 to 2021.

4. Suggestions, limitations & prospects

There are some suggestions of investment. At this stage, Johnson & Johnson is suitable for moderate purchases. Johnson & Johnson still has room for improvement at this stage. JNJ's operating costs will be smaller after the pandemic is over. However, JNJ is not suitable for bulk buying. Base on its P/E ratio, JNJ still has the risk of being overvalued. It is not the best time to buy too many shares because the price is too high right now, which is 171.07. As it may be overvalued, it may drop in price soon. In this stages, the investors should wait and see the price trend now. Nevertheless, a current dividend of JNJ is in very good shape. It is higher than most of the competitors in the same firm, this opportunity should not be missed. Last but not least, this is the golden age of the firm, which is the reason that JNJ should moderate purchases now.

The research of this article has some drawbacks and shortcomings. This study just focuses on the data from the US stock market and it just has the latest five years' data and there are some objects that are not computed and included. There are some suggestions for investment. At this stage, Johnson & Johnson is suitable for moderate purchases. Johnson & Johnson still has room for improvement at this stage. JNJ's operating costs will be smaller after the pandemic is over. However, JNJ is not suitable for bulk buying. Based on its P/E ratio, JNJ still has the risk of being overvalued. It is not the best time to buy too many shares because the price is too high right now. As it may be overvalued, it may drop in price soon. At this time, the investors should wait and see the price trend now. Nevertheless, the current dividend of JNJ is in very good shape. It is higher than most of the competitors in the same firm, this opportunity should not be missed. Last but not least, this is the golden age of the firm, which is the reason that JNJ should moderate purchases now.

The research of this article has some drawbacks and shortcomings. This study just focuses on the data from the US stock market and it just has the latest five years' data. As a consequence, there are some objects that are not computed and included. This article just includes the analysis of current data but without the future data forecast can be calculated, so only the general trend can be seen, and there is no accurate data for the future. In this paper, only in-sample data was used, and no out-of-sample data was used for testing. For the future study, there should be more about helping the future valuation and even the general valuation trend of the whole firm. To obtain a more accurate result, a larger data sample should be used, i.e., to study more data from previous years (e.g., the decades). To make the research results more credible, using some out-of-sample data to see if the results match, such as markets other than the U.S. stock market.

5. Conclusion

In conclusion, this paper investigates the method of stock selection based on the data from the SEC. Specifically, study and calculate these data in four categories, i.e., valued, return, profitability, and payout. According to the analysis, the P/E of JNJ is low, which means it is not been overvalued and the P/E is not that low either. Therefore, the value of the company still can grow in the future. Moreover, JNJ's profitability and ability to return are strong enough and the company uses assets very efficiently. Besides, JNJ pays dividends every year and it even kept increasing over the past five years. Nevertheless, the trend of these data is all positive. In the future, profits and dividends have a good chance of continuing to rise. Overall, these results offer a guideline for selecting JNJ as a target of investment.

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