Corporation Selection in Terms of Payout, Growth, Profitability and Valuation Indicators

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Abstract. Investment strategy and corporation selection are the important measures to help investors to beat the market by using their limited capital. Financial indicator measure is used as a common tool in corporation stock selection to help the investors to build their portfolio. This paper covers the data from 2015 to 2021 to examine the key financial ratios which include payout, growth, profitability, and corporation valuation of Procter & Gamble and its competitors in the industry. After the comparison of payout policy, profitability, capitalization and growth, PG will be the best corporation to invest. However, the research is limited due to the short run time and ignores the business cycle factors (e.g., inflation and acquires and merges). In the future research, it is suggested that a more complicated model would be used to help investors to examine more indicators. Overall, PG is one optimal investment decision in the industry which could help investors to win in the short run decision. These results shed light on corporation selection, portfolio management and financial ratio analysis in the real stock market practice.

Keywords: Corporation selection; financial ratio analysis; profitability; growth.

1. Introduction

The current investment strategy in the stock market would be one important and interesting topic of the financial market. A correct selection from stock pools could effectively help the investors to beat the market and win both in the short run and long run. There are many ways and methods, which would be applied from modeling and evaluation to help investors to decide. Financial indicators are used as a common tool in corporation stock selection to help the investors to build their portfolio.

The previous literature and empirical research outcomes could bring lessons, support, and insights for this paper. Financial ratio analysis is one effective way to build the connection between the financial statements and potential users which requires solutions on the decision-making process [1]. Financial information on statements could not drive the conclusion directly, but the ratio analysis could provide a detailed trend, index, and comparison for these data. Financial ratio analysis and other indicators could help the decision makers to understand the real status for the firm and they also drive the early warning for potential uncertainty and loss [2]. Financial strategy would affect the long run value adding for the investors and they are related with the decision which is from the key indicators' analysis [3]. The quality and accuracy of the forecast analysis requires the external and internal stakeholders to examine the investment decision in a modern and detailed measure because it is related with the best interest of the shareholder [4]. There is also research to show that some indicators might drive misleading results and some advanced models might tell a more complicated story. In the research from Wibowo and his team, the researchers found that some financial indicators such as price earnings ratio is influenced by the overvalued issue of the stock price and may bring misleading for financial investment decision [5]. Li has shown in his boo that after doing the multiple regression model, the profitability ratios and indicators are important and significant factors to influence the current and future return of the investment, and it would be one key factor to plan [6]. The complicated model which includes risk variables (RAROC) in the evaluation criteria on financial modeling could provide a wider and larger presentation for a firm's stock and financial information in recent years [7]. Fundamental analysis, strength analysis and other tools are also the supportive information in the corporation selection in investment because they could provide the evidence to support the financial ratio outcomes from financial statements [8]. Additionally, the portfolio management and selection require some more research on index trending and individual stock trending as well. Application of

Evolutionary Algorithms such as Moving Average Convergence-Divergence (MACD) is introduced as the new technical tool which helps to examine the potential stock index trending in portfolio selection [9]. The data envelopment analysis bad relative financial strength indicators are a new predictive tool in the portfolio selection and adjustment which could be some strong support for the financial ratio analysis [10].

In this paper, the firm Procter & Gamble and its competitors Colgate-Palmolive Co (CL), Kimberly-Clark (KMB), Church & Dwight Inc (CHD), Clorox Co/De (CLX) in the same industry would be examined and compared. It covers the data from 2015 to 2021 to examine the key financial ratios which include payout, growth, profitability, and corporation valuation. In the paper, after the comparison of multiple financial ratios, PG is the best consumer staples stock and consumer understanding and recommended as the first place in investment decision. The paper would present the data and method after introduction and literature review, show decisions and discussion about limitation before conclusion.

2. Data & Method

2.1 Data

The key data covers the data of the financial information of above ficve corporation from 2015 to 2021 to examine the key financial ratios which include payout, growth, profitability, and corporation valuation.

2.2 Indicators

The caculation fomulae for the indicators seletced in this paper are summarized as follows:

$$Gross\ profit\ margin = \frac{gross\ profit}{net\ total\ sales} \tag{1}$$

$$earnings\ per\ share = \frac{net\ income}{stock\ outstanding} \tag{2}$$

$$PE\ ratio = \frac{stock\ price}{earning\ per\ share} \tag{3}$$

$$dividend\ growth = \frac{current\ year\ dividend\ return - previous\ year\ dividend\ return}{previous\ year\ dividend\ return} \tag{4}$$

$$revenue\ growth = \frac{current\ year\ total\ revenue - previous\ year\ total\ revenue}{previous\ year\ total\ revenue} \tag{5}$$

2.3 Processing

The financial information is converted into the ratio and graphs by using the Microsoft Excel software. The seven years performances from different types of indicators are shown in the following paper to make the comparison and evaluation. After summarizing the given data, some key numbers such as the annual net total revenue, cost of good sold, the gross profit, the net income, dividends, stock outstanding numbers, and spot price are presented. Then, by using the ratio formulae and compare the yearly results to the competitors' annual results, the outcomes could provide good evidence to the decision makers.

3. Results & Discussion

3.1 Selection analysis

PG has seen an increase in this ratio during the past three years. Despite recent improvements in PG's ability to manage its capital investments effectively, the company has maintained consistent growth in PPE/Sales throughout our estimate, moving the ratio from 24.0 % in 2015 to 26 % by 2020. This is a more realistic representation of its historical average and reflects an assumption for the worst-case situation. There has been a solid historical year-to-year dividend growth rate of 15% a year. As shown in Fig.1, PG has shown a strong positive dividend continously in the past seven years and the tatal amount is much higher than its competitors.

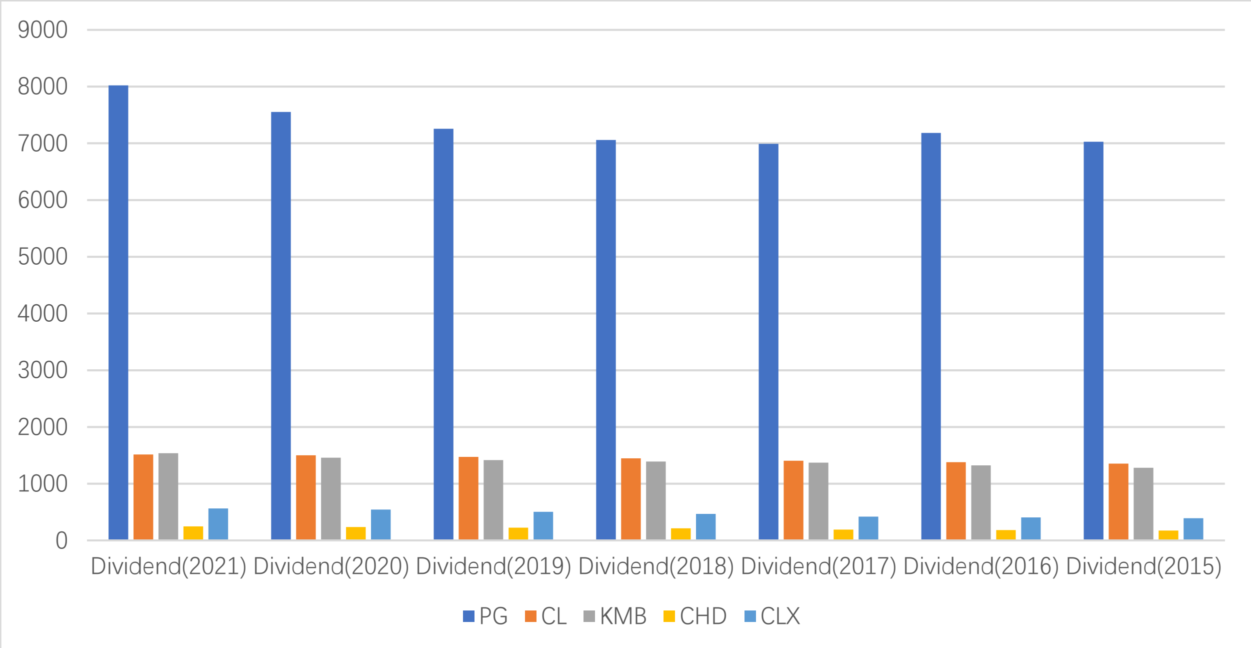

Fig. 1 Dividend Distribution 2015-2021

Procter & Gamble increased its earnings per share at a rate of 10 % each year over a half-decade. This increase in earnings per share is reasonably close to the average annual increase in the share price of 12%. To wit, the share price of Procter & Gamble has increased by 77% in the past five years, easily beating the return on the market, which was 60 %. This suggests that investors' perception of the company has not altered significantly during the past few years. It appears that the growth in EPS is largely reflected in the share price.

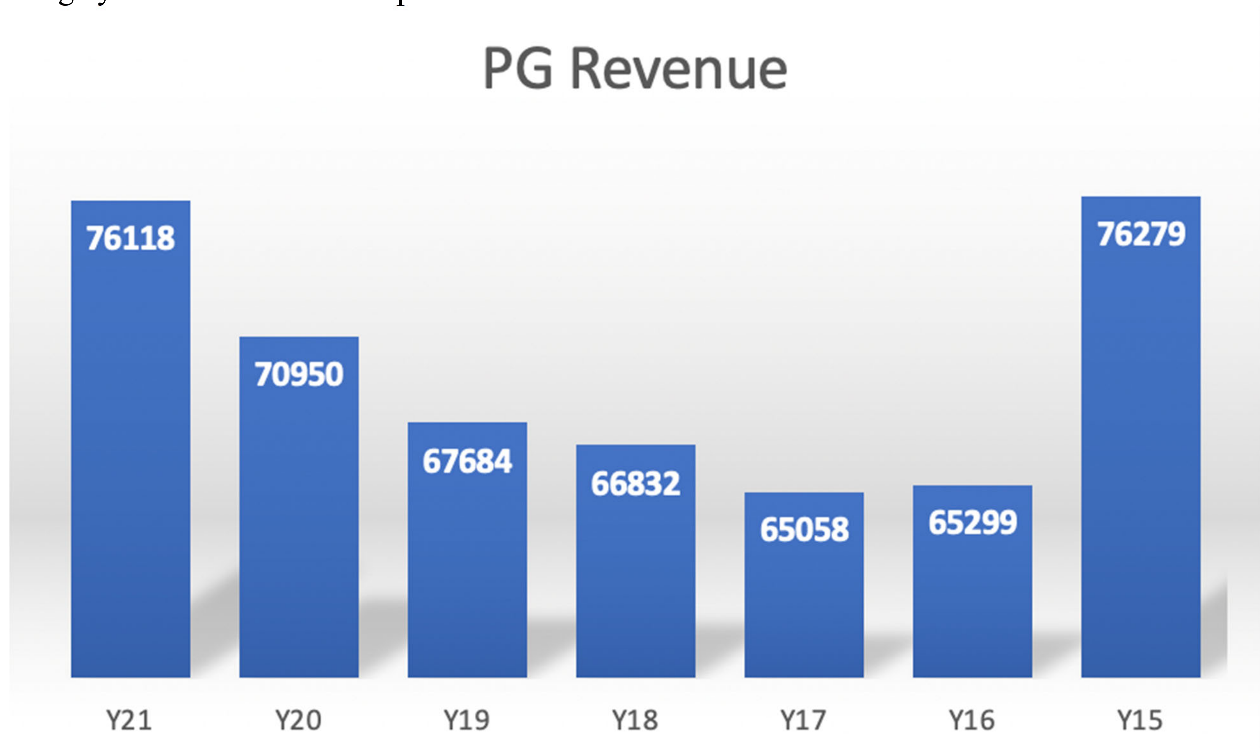

Fig. 2 PG revenue in past seven years

As illustrated in Fig. 2, Procter & Gamble's annual revenue for 2020 was $70.95B, a 4.83% increase from 2019, and for 2021, the annual revenue was $76.118B, a 7.28% increase from 2020. PG can keep consistent levels of return on assets and equity for the entirety of the forecast. PG had an average return on assets of 8.7 % over its entire operating history. This 8.7 % will be significantly reduced to an average return on assets of 8 % through 2019. Additionally, during the past five years, PG has achieved an annualized return on equity of 21.1 % on average. On account of the conservative nature of the modeling methodology taken, PG's return on equity will average only 14 % over the forthcoming years.

Earnings per share and dividends per share are two metrics that can be used to evaluate PG's capacity to make profits for its shareholders. PG achieved earnings per share growth rate that was 8.1 % higher than the historical average. Even though our conservative model brings this rate down to roughly a fourth of its historical average EPS growth, PG's anticipated EPS growth is still expected to be positive throughout the year 2019 at a rate of 2.2 %. Additionally, PG has provided its stockholders with a small historical average dividend payout of 11.4 %. For the forecast, the DPS for PG was increased to a level of 8.2 % annual growth. PG's final strategy focuses on growing structurally sound firms rather than simply increasing for expansion. The organization retains a valuable growth strategy for the future.

It is essential to analyze the entire shareholder return of any given stock and the return on investment realized by the share price. The TSR takes the discounted capital raisings into consideration in addition to any dividends, with the understanding that the dividends will be reinvestment. It is reasonable to assert that the TSR presents a more comprehensive view of dividend-paying firms than other metrics. The total shareholder return (TSR) for Procter & Gamble over the past five years was 103%, which is a superior performance than the remainder of the share price return. Besides, the dividend payments are mostly responsible for the divergence, which explains why this company could be a good investment.

3.2 Comparsion

Compared with its competing companies, The dividend yield for PG is higher. The PG dividend activity or its dividend yield compared to competitors (CL) certainly affect investor sentiment and move the stock price. PG is preferred because it has a high dividend. It is still prefered to used PG as the best investment opportunity because of its highest dividend value compared to its competitors. The dividend yield measures how much income has been received relative to the share price; a higher yield is more attractive, while a lower yield can make a stock seem less competitive relative to its industry. Reinvesting in these dividends can greatly enhance the written investment, and these dividends also increase the written on the stock. Although there is a certain risk with high dividend value as stocks do not reliably earn above-average risk-adjusted returns, the best investment target would still be PG.

After analyzing the Revenue data for each year and comparing it with other competitors, it has been concluded that initial selection. For example, PG is the best share of investment. Analyzing the data for 2021, the PG revenue shows outstanding numbers compared to the competitors by occupying 61%. In contrast, the rest of the companies are at the lowest holding, with CL being 14%, KMB being 15%, CHD being 4%, and CLX being 6%.

Then, looking at the Earnings per Share, in 2021, PG has exceeded all of its competing companies. The EPS for PG shows a decreasing trend from 2017 to 2019, but it started to increase significantly from 2019 to 2021. The two companies that could compete with PG for their EPS are KMB and CLX. CLX is better than KMB in this case. CLX shows a steady growth trend until the year from 2020 to 2021, the ESP decreased. In 2021, PG's growth is the highest compared with its competing companies, but CLX's trend looks steadier.

More price per share, better profitability, PG has a lower price per share. Comparing the price per share, CL is more profitable than PG because it is a higher per-share value. The higher the company's earnings per share, the better its profitability. After examining the price per share data, it has been concluded that CLX, the competitor of PG, outperformed in terms of price per share value throughout the year from 2015-2021. Hence these higher resulting numbers of competitor CLX serves as an indicator of a company's profitability compared to PG. Looking at the market capitalization, the market capitalization for P&G consistently exceeds its competing companies significantly.

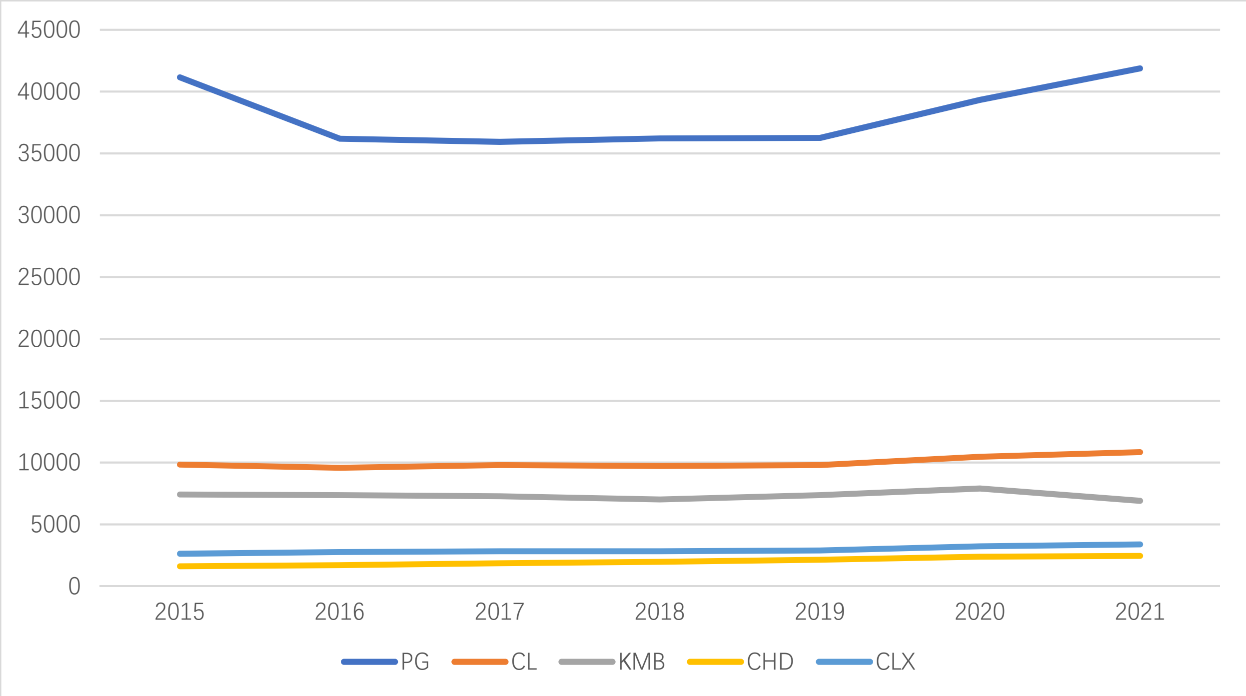

Fig. 3 Gross profit comparison in past seven years

Seen form the gross profit exhibited in Fig. 3, PG always has the highest gross profit compared to all of its competitors. It means that PG is successfully producing profit over and above its costs. As the value of csho decreases, the value of each share increases. Analyzing the PG data from 2015-2021, it is observed a significant decline in the number of outstanding common shares, representing that the value of PG shares increases every year. In comparison to its competitors (e.g., CL and KMB). The best P/E ratio range is between 10-20. For PG, the company is usually overvalued, of which its P/E ratio is often above 20, but it is lower compared to most of its competitors. The P/E ratio for KMB usually stays in the good range, but in the last year, 2021, PG has a better P/E ratio.

3.3 Suggestions

According to the analysis of pay-out, growth, profitability, and valuation, obviously, PG is the best option in these several years and plays as the top in the industry. It would help the investors to earn a good short run return in the investment portfolio.

4. Limitation & Prospects

There are some drawbacks and defects for the research methods and data selection which could provide some future development for coming scholars. The first limitation is that the period of the data research is from 2015 to 2021 which includes only seven years. The stock market changes, and macroeconomics changes might bring significant change. To be specific, the special financial and economic event and crisis bring significant different in the stock performance. The research currently does not cover one whole business cycle to test the long run performance for the firms. It means it would only provide the current and spot time investment suggestion. As for the long run estimation and evaluation, it would require the further examination. The second limitation is that some economic issues are not put into the research with more details and evaluation. The first issue is the impact from the COVID19 pandemic in the past three years, which brought the significant differences on the firms' performance and industry evaluation. The second issue is the inflation, which is not introduced into the ratio analysis, and it might not tell the real growth of dividends and returns. The third limitation is that the investment suggestion is usually driven by using the different types of models and methods to make a more diversified conclusion. Financial indicators and ratios are not the only methods and ignores the potential risk analysis.

In the future evaluation and examination, the researchers would consider using multiple measures in the evaluation of the firm performance. They could combine both the long run analysis and short run analysis to examine the different changes of performance under different phase of the business cycle. Additionally, the application of more complicated models, e.g., regression and adjustment of return on inflation should also be added to provide more insights in decision making.

5. Conclusion

In conclusion, this paper investigates stock the investment selection based on key financial indicator analysis. Financial ratio analysis is still the main tool in the portfolio building and stock selection because it would convert the raw financial information into the clear and accurate index, ratio, and presentation. They help investors to make the decision correctly in both the short and long run. After comparing to the competitors' performance, PG is the best consumer staples stock. It is the best consumer staples stock in terms of its dividend yield, growth, profitability, and valuation among all its competing companies. This paper could be a strong supportive recommendation to investors and professional users in the corporation selection in the stock investment market despite it has some limitations. In the future, researchers could do further analysis and long run observation on this industry and these firms to see the further performance. Overall, these results offer a guideline for corporation selection and portfolio management in real market practice.

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