

The industry status of the Consumer staple sector under Covid-19 and stocks analysis

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Abstract. Covid-19 is a pandemic that makes a great influence around the world, which is a big shock on people's health and social economy. However, not all industries are experiencing a big decline under the impact of the Covid-19, which are still a good investment choice. This paper focuses on the performance of stocks in the consumer staples sector by combining an analysis of three representative companies and comparing their financial statistics before and after the pandemic. After estimating companies and stocks in consumer sectors, the results present relatively great investment value in markets with lower volatility and risk in this sector during the pandemic, thanks to the steady demand for this industry. This paper compares some key data of the consumer staple sector and companies belong to it before and after the pandemic.

Keywords: Market; Consumer staples; Company status; Covid-19; Stock Analysis.

1. Introduction

From the end of 2019 which is the start of the pandemic, to August 20, 2022, more than 591 million people have been infected with COVID-19 and nearly 6.4 million were killed worldwide [1]. In this case, the pandemic has slowed the pace of the world's development of the economy as many global populations were placed under lockdown [2]. It prevented the close connection among countries to some extent, and even make it hard for people's daily work and business running leading to a recession in different sectors. It has caused millions of people losing their livelihoods and investors' pessimism in the market [3], and transferring to the US economy and financial market, the S&P 500 dropped 25% during March 2020[4].

Covid-19 caused a huge crash in the stock market in 2020. From February 24, 2020, to February 28, 2020, The Dow Jones Industrial Average dropped more than 3000 points to be the worse week for Wall Street since the financial crisis in 2008 [5]. Covid-19 is the main factor that led to global energy crises and food crises, from 2020, the price of nearly all kinds of food has constantly increased even doubled. Increased prices reflected the shortages of food supplies worldwide intensifying hunger during the pandemic. Covid-19 with high infectiousness brought huge risks to tourism and transportation, it is easier to spread the virus or be infected during a journey and taking public transportation. In this case, travel restrictions have been imposed by many countries and regions, and in all cities around the world, the planned table has declined by 80-90% [6]. According to UNWTO [7], there was a 65% decline in International tourism in the first six months of 2020, which presented the same declining trend as air passengers. Due to the pandemic spread, the retail sector also experienced a decline during when pandemic outbreak, some of them had to temporarily stop their business or only depend on the internet. It strongly affects retailers around the world and resulted in a recession.

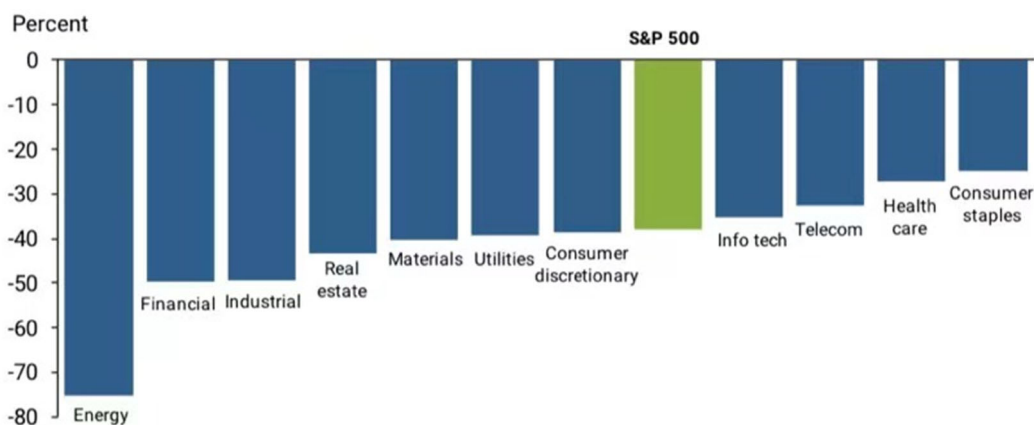
There are still number of sectors that were strongly affected during the pandemic, industries like manufacturing, Energy power, arts, and even sports where been affected negatively, while E-commerce, information techniques, and health care these sectors got rebounded after a short decline. Given that, on the whole, the pandemic brought disaster and massive negative influence, however, the impact on the individual sector is not always the same, which should be analyzed independently and specifically.

After having a basic knowledge of the influence on the whole sector areas, in order to be more specific and persuasive to present information about individual sectors during the pandemic, the rest of this article will only focus on a certain sector that is close to our lives most— Consumer staples.

Consumer staple sectors are mainly selling a series of essential products for consumers, which are usually used to meet their daily needs. It is often broken down into foods, beverages, tobacco, household goods, and hygiene products [8]. Since products manufactured by the consumer staples sector are usually those essential for the user’s life, for instance, people have to drink, brush their teeth, and toilet every day, in this case, drinking water, toothpaste, and bumf are constantly needed by consumers. These products are always needed with stable demand no matter the state of the market and even the price of these things, guarantees steady sales volume with constant cash flow for companies in the consumer staple sector all the time. Because of this, consumer staple stocks are non-cyclic with big volatility and are always good options to invest in for consistent growth and solid dividends [8].

Even during Covid-19, this sector still presents its stability and low fluctuations as usual. It is can be seen in the figure 1, from February 24 to March 20, which is the first event window of Covid-19 in the USA. It caused stocks in all sectors of the S&P to return to a different degree, however, the sector with the least decline, consumer staples, dropped 25%, which shows great stability and risk-averse ability during the recession [9].

And even during the whole period of the pandemic, according to the research [10], the consumer staples sector was less affected by Covid-19.

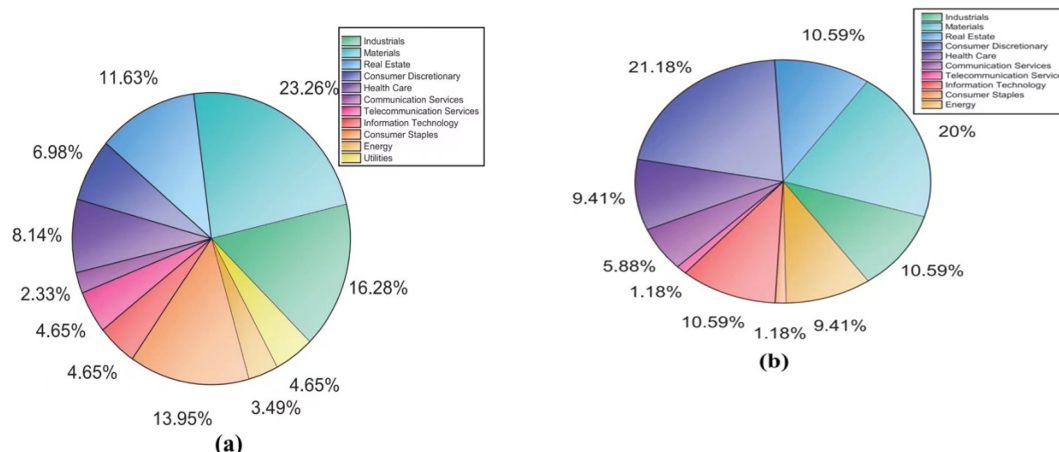


Source: Market Assessment of COVID-19

Figure 1. S&P 500 returns by sector: February 24 to March 20.

The figure 2 shows the sector distribution for the low volatility range group and high volatility range group. It is easy to see, that firms belonging to the consumer staples sector contribute 13.85% to the low volatility range group and 1.18% to the high volatility range group. It further identified that firms in the consumer staples sector have smaller stock volatility and price overreaction, which can be explained by the increasing need and panic-buying for paper, rice, and other consumables because of the lockdown caused by Covid-19 [11] [12].

Thus, from a macro perspective, the consumer staple sector and its companies and stocks performed well during a pandemic with low volatility and stable demand, making it more attractive for investors compared with other sectors greatly affected by Covid-19.



Source: The determinants of the COVID-19 related stock price overreaction and volatility.

Figure 2. Panel(a): Low Volatility Range group; Panel(b): High Volatility Range group

In order to further discuss the specific impact on consumer staples and the performance of their specific stock, this essay will analyze three entities representing this sector most to do a better explanation.

In a large number of enterprises in the consumer staple sector, we select PepsiCo, Inc., The Estée Lauder Companies Inc, and Protector&Gamble Company. These three companies are large firms with over \$15B market cap, typically representative companies in the consumer staples sector. PepsiCo, Inc (PEP). is an American company that produces and sells various food, snack, and beverage worldwide, one of the most successful firms in the beverage market as Coca-Cola company? The Estée Lauder Companies. Inc (EL). is a very successful enterprise manufacturing, marketing, and selling skincare, makeup, and cosmetic products worldwide. The Protector&Gamble Company, (PG). provides a large range of consumer products including Beauty; Grooming; Health Care; Fabric&Home Care; and baby, Feminine&Family Care.

These three companies are in different areas of consumer staples, which can represent this sector from all kinds of aspects. Therefore, the following part will focus on these three companies' annual reports and financing statistics to analyze their performance and the investment value of stocks during Covid-19, which may be useful to estimate and understand the whole consumer staple sector.

2. Comparison of the Industry status before covid-19 and post-covid-19

2.1 Pandemic impact on the three companies

2.1.1 Changes in PepsiCo during the pandemic

According to the table 1, it can be directly seen that there is a constant increase in its sales presented as revenue which increased by more than \$100 billion. It is a sign showing stable cash and revenue, and no reduction in sales even during the pandemic. And from the company itself, the report presented satisfaction with the performance of PepsiCo, as no materially adversely impact caused by Covid-19 and any liquidity deficiency as a result of the pandemic, even during 2020 the inventory turnover of PepsiCo still up to 7.62 times. It presents stable demand for the consumer staples sector again, even though beverage as Coke is not as essential as water in our life.

However, Covid-19 did not bring a negative impact on PepsiCo. It reports presented lots of problems, for example, material and packaging supply shortages, labor shortages as illness, port closure, or border restrictions, which greatly improve the cost of operating and selling. It is reflected in the increasing selling, general and administrative expenses, from 2019 to 2022, the expense rises from \$26,738 to \$31,235(in million), which caused a decline in net income in 2020 to \$71.75B(\$2B lower than 2019) even though a constant increase in sales it had. Moreover, results like increased sanitation, allowance for credit losses, and upfront payment reserves brought by Covid-19 negatively

influence a lot on the company's profitability. Given that, PepsiCo recorded an allowance for expected credit losses of \$56 million, and \$20 million of a reserve for product return in 2020, which exactly adversely impact Pepsi's profitability.

Table 1. PepsiCo income statement (In millions)

	2021	2020	2019
Net sale	\$79,574	\$70,372	\$67,161
Cos of sales	\$37,075	\$31,797	\$30,132
Selling, general and administrative expenses	\$31,237	\$28,495	\$6,738
Net Income	\$7,679	\$7,175	\$7,353

Source: 2021 Annual report of PepsiCo

2.1.2 Changes in The Estée Lauder Companies Inc. during the pandemic

Although Estée Lauder is one of the companies belonging to consumer staple sectors like PepsiCo, it experienced quite differently during the pandemic. Not like the beverages that were still popular with great demand during Covid-19, makeup and cosmetics were exactly influenced by the pandemic reflecting decreasing sales. Covid-19 changed consumers' preferences and practices, to be specific, the demand for makeup and cosmetics continued to be weak during the pandemic, because of fewer makeup usage occasions and ongoing mask wearing.

According to the table 2, the pandemic makes a negative impact on Estée Lauder from basic sales, the net sales in 2020 are nearly \$600 (in millions) and \$2,000 (in millions) lower than in 2019 and 2021 respectively. More astonishingly, the net earnings in 2020 are even a third of what it was before Covid-19. Much more money used in goodwill impairment that increased the expense seems to be the reason to explain. Given the constant decrease in

makeup and cosmetics during the pandemic, Estée Lauder made additional revisions, changes in circumstances in these reporting units make it significant to carry out an interim impairment review of trademarks and goodwill.

However, the severe pandemic did not destroy Estée Lauder. As a big enterprise in the consumer staples and cosmetics area, it took efficient advantage of the leverage of its network of global supply and manufacturing to guarantee its supply chain and normal operations to expand online malls, which was a wise investment for long-term sustainable development. And by the end of the first quarter of 2021, all manufacturing and distribution facilities were running at a sufficient level. It kept the competitiveness of Estée Lauder in the market, and with the support of its brand, the earnings of Estée Lauder rebounded to a high level in 2021.

Table 2. EL income statement (In millions)

	2021	2020	2019
Net sale	\$16,215	\$14,295	\$14,863
Cos of sales	\$3,834	\$3,552	\$3,387
Goodwill impairment	\$54	\$812	\$68
Operating expense	\$9,763	\$10,136	\$9,163
Net earnings	\$2,875	\$696	\$1,794

Source: 2021 Annual report of Estée Lauder

2.1.3 Changes in The Protector&Gamble company during the pandemic

During the pandemic, P&G did not be affected negatively a lot as a major Health Care; Fabric&Home Care production company. P&G's priorities during the pandemic were protecting the health and safety of employees and maximizing the availability of products to help to meet the consumer's health, hygiene, and cleaning needs. In this case, P&G kept a 5% organic sales growth and 6% organic sales in 2020 and 2021.

From the comparison between the net sales in 2019 and 2020, the table 3 shows that demand for health care and home care production was increasing by 10% and 7%, which was a result of improving

health and cleaning consciousness during the pandemic and more time locked in the home. In this case, because the company sells products that are essential to the daily life of consumers, Covid-19 did not greatly negatively impact the net sales of P&G. And in 2021, net earnings had increased 11% due to the increase in net sales and 30-basis point in net earnings margin, which was primarily due to the increase in gross margin driven by cost saving and increased selling prices, partly offset by unfavorable foreign exchange impact and bad products mix.

Table 3. Net sales change in P&G (2020 vs 2019)

	Price	Net Sales Growth
Health Care	1%	10%
Fabric & Home Care	1%	7%
Baby, Feminine & Family Care	1%	3%
Total Company	1%	5%

Source: 2021 Annual report of Protector & Gamble

From the financial statement of P&G showed in the table 4, it proves an increasing demand leading to higher sales again. And even though there was also a rising cost due to the pandemic, which included declining purchasing power of customers due to illness and unemployment, shortage in supply, and import/export restrictions, it did not really affect the earnings. It benefited from the strategy P&G took, to discover lower-cost ways of working with fewer sources and use new digital tools to improve efficiency.

After reviewing the performance of these three companies during the pandemic, there is a deeper understanding of the situation of consumer staples sectors during the Covid-19 period. These three companies are representative companies in consumer staples sectors but they all differ from each other in a specific area, which presents various problems they met and different strategies they use. The following part will combine some financial ratios of the companies themselves to do a further estimate of their operating performance post-pandemic.

Table 4. P&G Earning statement (In millions)

	2021	2020	2019
Net sale	\$76,118	\$70,950	\$67,684
Cos of sales	\$37,108	\$35,250	\$34,768
Selling, general and administrative expenses	\$21,024	\$19,994	\$19,084
Net earnings	\$14,352	\$13,103	\$3,966

Source: 2021 Annual report of Protector & Gamble

2.2 Ratios analysis(Liquidity, solvency, and profitability) post-pandemic

According to data and ratios, it is clear that Estée Lauder has a great performance in its liquidity that both current ratio and quick ratio are above 1, which shows very positive liquidity in cash flows. PepsiCo and P&G, although their liquidity ratios are all below 1, it do not mean they are in insufficiency of liquidity. Because PepsiCo and P&G are companies that belong to the grocery stores style that have large turnovers, which are over 5 times the average inventory sold in the past year far more than Estée Lauder. Given that PepsiCo and P&G have stable cash flow coming in on a regular basis, as daily operations and large sales maintain great liquidity. Moreover, from the solvency perspective, due to the influence of Covid-19, these three companies used more leverage in the past period to maintain their supply chains or expand online markets, which deducted the negative impact of Covid-19 to large extent. Although the debt ratios are all below 1 presenting a controlled extent of the firm's financing with debt, there is also a problem in the financing of these three companies with a high Debt/Equity ratio of over 1 related to increasing financing with debts, which may bring more risks to the capital structure in the future. However, it is unnecessary to worry a lot about their risks and even bankruptcy possibility, since these three companies are all big firms with very large market

caps and credit ratings from Moody over A showing the great capability of financing and stability even during a market recession like Covid-19.

What is more, as constant products demand in consumer staples sectors and the different advantages of these three big companies, they performed very well during the pandemic. The profit margin, above 10%, is the most persuasive proof to identify their great profitability during Covid-19. Especially the P&G, as mentioned hereinbefore, increase in cleaning, hygiene, and home care demand, facilitated the sales and enhance the profitability.

Overall, according to the statistics from the latest report of their three companies, they are all in relatively great circumstances contemporarily. Except for relatively high leverage compared with issued equity, here are very few signs of the negative influence caused by the pandemic. And the consumer staples sector represented by these three seems running on a proper path as it used to be.

Table 5. Financing ratios

	PepsiCo	EL	P&G
Market cap	241.169B	89.897B	335.282B
Current ratio	0.83 times	1.59 times	0.65 times
Quick ratio	0.66 times	1.1 times	0.44 times
Inventory turnover	8.53 times	1.47times	6.08 times
Total debt ratio	82.5%	73.2%	60.02%
Debt/Equity ratio	4.72	2.74	1.51
Credit Rating	A1(Moody)	A1(Moody)	Aa3 (Moody)
Profit margin	11.28%	13.48%	18.38%
ROA	8.26%	10.34%	9.88%
ROE	54.61%	35.99%	31.64%

Source: Annual report of PepsiCo 12/31/2021; EL 30/06/2022; P&G 29/06/2022

3. Analysis of the Development planning and prospect

3.1 Development planning/ strategy

3.1.1 PepsiCo

According to the annual report of PepsiCo, PepsiCo put forward the pep+ strategy that is planning to continually expand its research centers and factories around the world. Meanwhile, leverage consumer insights, food and science, and engineering to meet the strategy to innovate a portfolio of beverages and convenient food. Pep+ is aiming to achieve sustainable development that contributes to winning in the marketplace and position.

Furthermore, due to the impact of the pandemic and the experience of running during Covid-19, PepsiCo will continuously develop its eCommerce business worldwide to meet the demand of the market. PepsiCo has already established its first two Digital Hubs in Dallas and Barcelona and plans to expand more in the future to boost future development.

3.1.2 Estée Lauder

Estée Lauder is a mature makeup and cosmetics enterprise, which always has a clear long-term strategy for its future development. Because of Covid-19 and also the development in technology, Estée Lauder's strategy over the next years includes high-technology(cloud-based) and secure infrastructure building that can adapt to market and business dynamics. It also provides ways to build

a closer relationship with global retailers, freestanding stores, e-commerce sites, and social media, these are all expected channels consumers can shop in the future.

Besides innovation in technology, Estée Lauder also focuses on its brand and social impact. It will continue to further develop in environmental protection and sustainable development, which attach great importance to climate and energy; packaging; resources; employee health, and safety. These areas are expected to have better efficiency in utility and intend to reduce costs and waste.

3.1.3 Protector & Gamble

As a company majorly produces health care, family care, and cleaning products that are essential for people's daily life, especially after the outbreak of Covid-19, P&G took more social responsibility to build its brand. In P&G's developing strategy, it gave the first priority to the safety of the public from mask-wearing to hand-washing and safety protocols work. What is more, as Estée Lauder did, P&G also advocates for sustainable development, from producing to delivering, P&G is trying to reduce energy use and pollution in these processes.

Secondly, P&G's winning strategy allows a strong focus on its portfolio. In order to play a significant role in the brand choice among consumers, it will continuously enrich its products portfolio including Fabric Care, Home Care, Baby Care, Feminine Care, Hair Care, Skin & Personal Care, Oral Care, Personal Health Care, and Grooming benefit from the advanced supply chain and innovative producing techniques. These product portfolios are all financially attractive categories that leverage P&G's strength, which allows them to get a more significant market position and profits from the diverse offerings.

In addition, expanding categories in the products portfolio is not the final goal for P&G, in its winning strategy, P&G is aiming to maximize the availability of its products and build a closer connection with markets. P&G will sell its products via retail customers including mass merchandisers, internet, and e-commerce are new channels that expanding fast in recent times. More momentarily, P&G is going to make full advantage of the advertisement and social media to get in touch with consumers, creating new tools like "smart audiences" to reach consumers' precise demand for brand building.

3.2 prospect analysis

Overall, it seems that PepsiCo, Estée Lauder, and P&G are all having a clear strategy to assist to win in the future. All of these three companies are attaching great importance to technical innovation and digital improvement, it is predictable that these three companies will have a better ability to meet the global market needs by expanding their portfolio and sales channels, especially e-commerce will be the main approach for them to connect with consumers after Covid-19. In this case with various sales channels and technical support, they are fully assured of future sales and development to motivate their constant growth.

In addition, because of the need for brand building and increasing social responsibility, these three companies are investing a lot in long-term sustainable development. For example, PepsiCo has set a goal to use 100% sustainable sources of its key ingredients, cut 50% virgin plastic per serving by 2030, and aim to achieve net-zero emissions by 2040; P&G also set ambition 2030 goals to achieve a 50% improvement in products transportation emissions efficiency, making 100% of packing recycle. Their goals are all focusing on the future and environmental production, which may reduce their costs and waste from production to large extent in the future. All these behaviors are positive signs for their future development and profitability.

However, in order to achieve this series of goals, it requires a large investment for companies like PepsiCo, Estée Lauder, and P&G in new brands, categories, channel expansion, supply chain facilities, and technology improvement. These investments possible to lead to high costs in the short term, which may dilute the earnings of their shareholders. So, due to this situation and the impact from Covid-19 pandemic, there may be slow development of the profits from their equities. But in the long term, it is believed that these innovations and improvements will bring a great return to investors and shareholders.

4. Analysis of Stocks performance

After a general understanding of the situation and prospects of these companies in the consumer staples sector, this paper will combine specific statistics regarding the stocks' performance of these three companies to analyze the value of the investment.

In terms of risk that is the priority factor to influence investors' decisions, as the whole sector is slightly influenced by Covid-19, which did not bring a big recession to the consumer staples sector, PepsiCo, Estée Lauder, and P&G are operating at a normal face without huge volatility and fluctuations. Given that, their risks are generally controllable and low. According to the table 6 the values of Beta of these three companies are all below 1, which means lower risks for these three stocks compared with the average market risk. Benefit from the lower risk during the pandemic, they are favored by most investors as a matter of course.

However, companies with a large market cap like PepsiCo, Estée Lauder, and P&G are also facing overpriced and overvalued problems while giving a low investment risk. From a value investor perspective, all of these 3 stocks have very high PE and price/book ratios, which are greater than 10 and 1 respectively. And also from a PEG investor view, the statistics are all greater than 1, in this case, the prices and costs may be too high for most of the investors. Moreover, from a momentum investor perspective, even though table 6 presents the 50days moving average prices of PepsiCo are greater than the 200days average price, which presents a sign of a good chance to invest for price momentum in future days, the other two are completely different with PepsiCo. Lower 50days moving average prices means they are also not good stocks for momentum investment because investors are unlikely to get profit from the changes in prices.

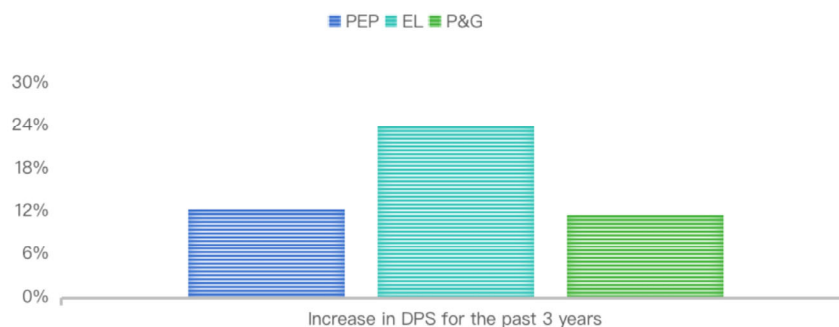
Table 6. Marketing ratios

	PepsiCo	EL	P&G
Beta	0.56	0.97	0.34
PE	35.94	39.67	24.19
PEG	3.36	2.89	4.07
P/B	12.81	16.59	7.19
DPS	\$ 4.60	\$ 2.07	\$ 3.24
MA 50	172.9	262.41	\$144.58
MA 200	169.21	286.16	\$151.59

Source: yahoo finance

The evidence above identifies these three companies may not proper choice for speculation in prices in a short time, and in fact, these large firms with the stable operation will never be proper investment companies if investors are expecting a huge profit from buying at a very low price and sell at the peak. The investment value of these companies as PepsiCo, Estée Lauder, and P&G is more reflected in their constant dividend from excellent daily operations. It is obvious to see the continuously increasing cash dividend on each share for the past three years, which protected the returns of investors to large extent, especially under the impact of Covid-19.

Overall, with less impact of a pandemic, the consumer staples sector representative by PepsiCo, Estée Lauder, and P&G has a good investment value as constantly increased dividends (Figure 3) and controllable risks. And as the whole sector is in a relatively economic environment, with consistent dividends and low risks from the stable daily operation, it is not impossible for investors to find some companies with a relatively small market cap that are appropriate for value and momentum investment.



Resources: PepsiCo 12/31/2021; EL 30/06/2022; P&G 29/06/2022

Figure 3. Increase rate of dividend per share in PepsiCo, Estée Lauder and P&G

5. Conclusion

In the background of the Covid-19 pandemic, while a recession in most sectors reflected a sharp decline in corporate profits leading to volatility in the equity market, some evidence still shows that participants of the market have a different impact across business sectors [9].

This paper, analyze the consumer staples sector from its representative companies' performance, changes in market and prospect of future development. It presents that the consumer staples sector is such an area that had a relatively good performance during the pandemic, it is healthy for

companies in the sector no matter the liquidity, solvency, or profitability. It actually provided good investing choices for people during the pandemic.

In addition, even after the years the pandemic seriously influences society and the economy, the consumer staple sector is still a very worthy area to invest in. This paper has illustrated the good stocks index and positive long-term strategies of PepsiCo, Estée Lauder, and P&G, which are representative consumer staples sector's optimistic development in the future. Moreover, in the USA, economists are requiring the president to give a larger stimulus to nations, exceeding the existing \$1200 as a stimulus to consumers, which allows more consumption from purchasing consumer goods to help the economic recovery [13]. Given that, this paper shows a positive attitude to investors for long-term investment in the consumer staple sector, especially PepsiCo, Estée Lauder, and P&G.

To sum up, the consumer staple sector and companies belonging to it are worthy to invest in with a large number of positives. Readers are expecting to have a comprehensive understanding of the consumer staples sector from this paper, which helps to further analysis and investment practices.

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