

## THE EFFECTS OF ENVIRONMENTAL CHANGE ON FIRM PERFORMANCE: A COMPARISON OF THE PHARMACEUTICAL AND FOOD AND BEVERAGE INDUSTRIES

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### ABSTRACT

This study examines the effect of environmental change on firm performance comparisons in the food and beverage and pharmaceutical industries. The research methodology involves a literature review that includes articles related to factors that influence the performance of environmental change on firm performance comparisons in the industrial sector. The findings of this study reveal that liquidity, solvency, activity, profitability, and sales growth have a significant and positive effect on the performance of food and beverage companies. Liquidity, solvency, activity, profitability, and sales growth significantly and positively affect pharmaceutical companies' performance.

Keywords: Firm Performance, Liquidity, Solvency, Activity, Profitability, Sales Growth

### INTRODUCTION

Firm performance is a means of identifying negative and positive consequences that can affect a company. Firm performance is determined by certain indicators that measure the profitability of an organization or company (Sianturi, 2020). In this context, firm performance analysis serves as an instrument to assess whether companies in the food and beverage industry and pharmaceutical industry sectors listed on the Indonesia Stock Exchange experienced negative or positive effects before and during the COVID-19 pandemic. With the vast market potential of the food & and beverage sub-sector and the pharmaceutical sector in Indonesia, this is a good opportunity for industry players to attract a large number of investors to invest their capital.

According to the Minister of Industry (2021), the performance of the food & and beverage industry during the 2015-2019 period grew on average 8.16% or above the average growth of the non-oil and gas processing industry of 4.69%. Amid the impact of

the pandemic, during the fourth quarter of 2020, there was a contraction in the growth of the non-oil and gas industry of 2.52%. However, the food & and beverage industry was still able to grow positively by 1.58% in 2020.

The food & and beverage industry also plays an important role in the contribution of non-oil and gas processing industry exports. In the January-December 2020 period, the total export value of the food & and beverage industry reached USD31.17 billion or contributed 23.78% to the export of the non-oil and gas processing industry of USD131.05 billion.

According to the Ministry of Industry (2022), the growth of the food & and beverage industry in the third quarter of 2022 reached 3.57%, higher than the same period last year which was recorded at 3.49%. Despite being affected by the COVID-19 pandemic, the food & and beverage sub-sector was still able to grow and contribute to the growth of the non-oil and gas industry which reached 4.88%.

Meanwhile, in terms of sub-sectors, according to the Ministry of Industry (2021) in 2020, the growth of the Chemical, Pharmaceutical, and Traditional Medicine Industry group reached 9.39% (yoy), which not only increased from the growth of 8.48% (yoy) in 2019, but was also the highest industry group growth among other industry groups. Therefore, the Pharmaceutical Industry, which is included in the Chemical, Pharmaceutical, and Traditional Medicine Industries, is currently considered to be quite an important part of the sustainability of the Manufacturing Industry Sector in Indonesia and has led to the pharmaceutical industry being included in strategic industries that are the focus of overall industrial development. In 2019, the contribution of the Pharmaceutical Industry, Chemical Drug Products and Traditional Medicines increased to 34.03%. Likewise, high growth in 2020 is expected to be strongly supported by the growth of the Pharmaceutical Industry, Chemical Drug Products, and Traditional Medicines, which during the COVID-19 pandemic experienced increased demand. Because of the pandemic, the need for vitamins, supplements, and herbal medicines to increase immunity in general has increased, so the pharmaceutical industry that plays in this sector has gained considerable growth.

Based on this description, this research can be used as a reference, literature, and theoretical basis for similar research and contribute to factors that affect company performance. This research contributes thoughts for investors to conduct studies and knowledge about the assessment of companies to be funded. This research aims to contribute to the optimization of company performance.

## **METHOD**

The research method used in this article is to conduct a review of articles to determine the performance of environmental changes on the comparison of company performance in the food and beverage industry sector and the pharmaceutical industry. The results of this test can be used as a basis for developing a framework for environmental change on company performance in the comparison of the pharmaceutical industry and the food and beverage industry.

## **RESULTS AND DISCUSSION**

### **Agency Theory**

According to Scott (2015), the concept of agency theory is the relationship between the principal and the agent, where the principal is the party who hires the agent to perform tasks for the principal's benefit, while the agent is the party who carries out the principal's interests. This agency relationship arises when one or more people instruct others to provide services and then delegate decision-making authority to the agent. Therefore, shareholders must delegate their authority, such as decision-making power, to the agent at the time of delegation. Otherwise, the agent plays the role of decision-maker in the company to improve the welfare of the principal. Managers and shareholders have the same goal of increasing firm value by increasing shareholder wealth. However, managers do not always act in the interests of shareholders or against their wishes, resulting in conflicts between managers and shareholders of the company. Shareholders, as owners, are the employers of managers or their representatives. Problems often arise between shareholders and agents when owners delegate authority to agents.

According to Fakhriyah & and Mawardi (2020), agency conflict is caused by the separation of ownership and management. According to this theory, there is a gap between owners and managers arising from a decrease in share ownership. This condition causes managers to pursue their interests, rather than maximizing company value. Agency conflicts can be minimized by several alternatives, such as increasing corporate income through the use of debt, which will reduce the level of conflict between shareholders and managers. In addition, increasing the proportion of institutional ownership can also encourage more optimal supervision of management performance.

### **Signaling Theory**

According to Spence (1973) in Brigham and Houston (2019), signaling theory is an action taken by company management that provides signals or clues to investors about how management views the company's performance and prospects. When associated with this research, signaling theory plays an important role for companies because it has the

urge to signal information about the company's financial statements to external parties (investors), which can later be used as a consideration for investors to make investment decisions. The signals given by the company can be seen from the company's achievements as outlined in the financial statements which are then analysed using financial ratios to assess its financial performance. Performance is the result achieved by an organization within a period, both for-profit-oriented organizations and non-profit organizations (Fahmi, 2013). Meanwhile, corporate finance is a company resource related to operational activities managed by a field within the company.

In addition, the signaling concept reflects corporate governance behavior and gives investors an idea of management's view of the company's prospects. As a result, firms that are optimistic about the future tend to avoid selling shares and prefer to seek capital income through other sources, such as the use of debt that exceeds the usual capital structure target. In contrast, firms with a less optimistic outlook are more likely to sell shares, such as announcing a rights issue, which suggests that management has a less optimistic view of the firm's future. In addition, issuing shares more frequently than usual can send negative signals and depress the company's share price (Przepiorka & Berger, 2017).

### **The value of the company**

According to Dewi et.al (2019) said that high company value makes the company owner's desire because high value indicates high shareholder prosperity. When the company value is high, this creates a high level of prosperity for shareholders. Company owners who in this context are generally shareholders have a desire to see the value of the company increase because this reflects success and financial well-being for them. Firm value in the study is measured using Tobin's Q because the information provided by Tobin's Q is considered the best. Tobin's Q shows that the company is not focused on investors in the form of shares only. Tobin's Q can show the relationship between market valuation and the intrinsic value of the company. If the Q ratio is high ( $Q > 1$ ) then there is growth. the potential of a company is high and management is performing well on the company's assets.

Firm valuation can be considered as a method to measure the extent to which an entity can provide the level of return expected by shareholders. In addition, firm value also serves as a tool to reassure lenders that the company will not violate the terms of the debt agreement. The stock market price reflects firm value. If the share price is high, it indicates high investor interest, and with the increase in demand for shares, the value of the company will also increase. As the value of the company increases, the confidence of



shareholders also grows, encouraging them to allocate investment to the company. The funds invested by shareholders are then used as capital to support the company's operational activities.

### **Liquidity**

Liquidity is an important indicator that reflects the ability of a company to cope with its financial obligations in the short term. pay a short-term debt that is due and finance financial obligations when collected. According to Kasmir (2016: 128) Liquidity is a ratio that shows the company's ability to pay its maturing long-term debt or a ratio to determines the company's ability to finance and fulfill obligations when billed. Liquidity not only involves the aspect of paying debts but also involves the company's ability to effectively fulfill its financial obligations when collected.

In this study, researchers used the current ratio to calculate liquidity. Calculating liquidity using the current ratio is a common way because this ratio provides an overview of an entity's ability to meet its short-term obligations using its current assets. The current ratio, also known as the current ratio or financial ratio, is calculated by dividing current assets by current liabilities.

### **Solvency**

According to Cashmere (2018: 150), the solvency or leverage ratio is a ratio used to measure the extent to which the company's assets are financed with debt. This means how much debt burden the company bears compared to its assets. The solvency ratio measures the company's ability to meet its long-term obligations. A company whose total debt is greater than its total assets is a company that is not solvable. This ratio measures the long-term liquidity of the company so it focuses on the right side of the balance sheet.

This study calculates solvency using the debt-to-equity ratio because this ratio provides an overview of the proportion of debt and equity used by the company to fund its operations. Debt to Equity Ratio is calculated by dividing the company's total debt by shareholders' equity.

### **Activity**

According to Cashmere (2017: 115) the activity ratio is a ratio used to measure the effectiveness of the company in using its assets, including to measure the company's level of efficiency in utilizing the resources it has. By detailing the level of effectiveness and efficiency of the company in using assets, the activity ratio becomes a very useful tool for financial analysts, investors, and company management. These ratios help the extent to which a company can optimize the use of resources and play a key role in measuring the health and sustainability of a company's operations.

In this study, activity using total asset turnover (TATO). Total Asset Turnover is a financial ratio that measures the efficiency of a company in using its total assets to generate sales. This ratio is calculated by dividing the company's total sales by the average total assets. Shareholders and investors can use TATO to gain an understanding of how well a company is managing its assets to achieve revenue goals. This helps in making investment decisions.

### **Profitability**

According to Henry (2017), Profitability is a reflection of a company's ability to earn profit or profit in a certain period. Profitability can also describe the company's efforts to generate profits for shareholders, the higher the profitability ratio illustrates the high rate of return on investment for shareholders to attract investors to invest their capital. Profitability is one of the basics in assessing the condition of the company, profitability also has an important meaning in the business of long-term company survival.

In this study, profitability is calculated using return on equity. ROE provides an overview of the extent to which the company can generate profits for its shareholders by utilizing its equity. ROE measures the return on investment for shareholders in the form of net income generated by the company. ROE allows comparison of profitability performance between companies in the same industry or with competitors. It helps in evaluating the extent to which a company can compete in generating profits for its shareholders.

### **Sales Growth**

According to Cashmere (2018: 107) sales growth is a ratio that describes the company's ability to maintain its economic position amid the economy and its business sector. Companies with relatively stable sales can more safely obtain more loans and bear higher fixed costs than companies with unstable sales.

In this study, sales growth can be measured using the sales growth ratio. Sales growth has several important benefits in analyzing company performance and evaluating business activities. Shareholders and investors often pay attention to sales growth as a key indicator of company performance. Strong growth can increase their confidence and make the company more attractive for investment. Although it is not common to use a ratio for sales growth, calculating sales growth can provide important insights into a company's performance in generating revenue.

### **Relevant Empirical Research Results**

Yanti and Widodo's research (2023), entitled "Comparative Analysis of Financial Performance Before and During the Covid Pandemic- 19 In Food and Beverage

Companies Listed on the Indonesia Stock Exchange”. This research shows that: (a). Liquidity ratio there is no significant difference before and after the Covid-19 outbreak. (b). Solvency ratio there is no significant difference before or after the Covid 19 outbreak. Profitability Ratio There is no significant difference before or after the COVID-19 outbreak. Activity Ratio There is no significant difference before or after the Covid-19 outbreak.

Wijaya et.al research (2023), entitled “Comparison Of Financial Performance Of Food And Beverages Sector Companies Listed On The Indonesian Stock Exchange Before And During The Pandemic Covid-19”. This research shows that the: (1) Overall, the variables in this study do not have significant differences in the financial performance of Food and Beverages sector companies listed on the Indonesia Stock Exchange before and after COVID-19. (2) In each financial performance measurement tool there is also no significant difference in the financial performance of food and beverages sector companies listed on the Indonesia Stock Exchange.

Widhi et.al research (2023), entitled “Comparative Analysis of Financial Performance in the Consumer Goods Industry Sector Before and during the Covid-19 Pandemic (Case Study of the Food and Beverage Sub-Sector Listed on the Indonesia Stock Exchange)”. The research shows that: 1. There is no difference in the CR variable in the comparison of financial performance before and during the pandemic, but the increase in average shows that food and beverage sub-sector companies also can meet current liabilities using the company's current assets, indicating that the company's financial condition is strong. assets, indicating that the company's financial condition is strong. 2. There are differences in TAT variables in financial performance before and during the pandemic. There is an increase in average before and during the pandemic, which means that TAT has an efficient financial performance in using the company's assets. efficient financial performance in using company assets to get company profits. 3. There are differences in ROA variables in financial performance before and during the pandemic. There is a significant increase in the average before and during the pandemic, which means that ROA food and beverage sub-sector companies are effective and efficient in managing the company's assets to get company profits. to get company profits. 4. There are differences in ROE variables in financial performance before and during the pandemic, where the average ROE has decreased significantly in food and beverage sub-sector companies because the company has not been able to maximize the company's capital to get company profits. 5. There is no difference in the DAR variable in the comparison of financial performance before and during the pandemic. The average DAR has increased

significantly which indicates that there is high debt in food and beverage sub-sector companies to pay for company assets to maximize company profits. 6. There is no difference in the DER variable in financial performance before and during the pandemic. The increase in the average DER during the pandemic is due to high corporate debt to fulfill the company's obligations, but the food and beverage sub-sector companies still maintain the DER value to meet the company's profit maximization. beverage sub-sector companies still maintain the DER value so that it meets the existing criteria.

Dien et, al research (2023), entitled “Comparative Analysis Of Financial Performance In Pharmaceutical Companies Before And During The Covid-19 Pandemic”. This research shows that the: (1) Based on the results of the Current Ratio tested using the Paired Sample T-test, it shows that there is no significant difference in the financial performance of pharmaceutical companies listed on the Indonesia Stock Exchange before and during the COVID-19 pandemic. (2) Based on the results of the Return On Assets tested using the Paired Sample T- test, it shows that there is no significant difference in the financial performance of pharmaceutical companies listed on the Indonesia Stock Exchange before and during the COVID-19 pandemic. (3) Based on the results of the Total Assets Turnover tested using the Paired Sample T-test, shows that there is no significant difference in the financial performance of pharmaceutical companies listed on the Indonesia Stock Exchange before and during the COVID-19 pandemic. (4) Based on the results of the Debt to Equity Ratio tested using Wilcoxon Sign Rank, it shows that there is no significant difference in the financial performance of pharmaceutical companies listed on the Indonesia Stock Exchange before and during the Covid-19 pandemic.

Dewi and Kencana research (2022), entitled “The Impact of the Covid-19 Pandemic on the Performance of Pharmaceutical Companies listed on the IDX”. The results show that Based on the results of the research studied pharmaceutical companies listed on the IDX period 2019 (before the covid-19 pandemic) and period 2021 (during the covid-19 pandemic) by using the ratios of liquidity, activity, and profitability can be seen in the table below. There is no significant difference before and during the pandemic in the pharmaceutical industry, this is because before the pandemic the demand for vitamins, supplements, and herbal medicines was mostly used for stock medicine in pharmacies, clinics, and hospitals. Meanwhile, during a pandemic, people buy more buy vitamins, supplements, and herbal medicines for personal use at home.

Hartati et.al research (2022), entitled “Differences In Financial Performance Before And After Covid-19 Pandemic In Health Sector Companies Listed On The BEI”. The research shows that Based on the results of research and discussion using the paired

sample t-test test, this study can be concluded that the liquidity ratio measured using (the current ratio and quick ratio) there is no difference in financial performance before and after the COVID-19 pandemic in the health sector (hospital). Based on solvency variables using indicators (debt to total assets and debt to total equity) there are no differences in financial performance before and after the COVID-19 pandemic in the health sector (hospitals). Based on activity variables using indicators (total asset turnover and fixed asset turnover) there are no differences in financial performance before and after the COVID-19 pandemic in the health sector (hospitals). Based on profitability variables using return on equity indicators, there is no difference in financial performance while (net profit margin) there is a difference in financial performance before and after the COVID-19 pandemic in the health sector (hospital). Research results The results of the research that have been described in each measurement indicator do not have significant differences due to these differences, each hospital company has different principles in managing existing capital resources, paying off costs, and dividing profits or profits. share profits or profits.

## CONCLUSION

This study aims to examine the effect of environmental change on firm performance: a comparison of the pharmaceutical and food and beverage industries:

1. Food and Beverage: according to Yanti and Widodo (2023), Wijaya et.al (2023) said there was no significant difference before and after the pandemic. While according to Dwi et.al (2023), There is a significant difference before and after the pandemic.
2. Pharmaceutical: Dien et.al (2023), Dewi and Kencana (2023), and Hartati et.al (2022) said there is no significant difference before and after the pandemic.

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