


The effect of financial ratio and firm size on firm value, with sustainability report as a moderating variable

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Article Info	ABSTRACT
Keywords: Current Ratio, Earning Per Share, Firm Size, Firm Value, Sustainability Report	The purpose of this study was to determine whether there is an influence of financial ratio and firm size on firm value, with sustainability report as a moderating variable. The sample of this research was 12 firm sector food and beverage listed on the IDX in 2020-2022. This research is descriptive statistics. The method used in this study is quantitative method with multiple linear regression analysis techniques and Moderated Regression Analysis (MRA). The results of research with the t test show that EPS has a significant positive effect on firm value, SIZE has a significant negative effect on firm value and SR*EPS has a significant negative effect on firm value. While CR, SR*CR, and SR*SIZE has no effect on firm value.
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INTRODUCTION

The increase of the average temperature of the earth's surface due to global warming caused by the greenhouse effect and sea pollution due to industrial waste or garbage. Waste production in Indonesia is still very high and its processing is minimal. Every year, 39% of discarded waste is not managed and accumulates polluting the environment (kompas.id, 2023). The regulations governing environmental management are Law Number 32 of 2009 which states. "Firms engaged in business activities in the field of and/or related to natural resources are obliged to implement social and environmental responsibilities". The regulation is also supported by Law Number 40 of 2007 Article 66, which mandates that all social and environmental responsibilities must be reported by firms in the annual reports. This information is then presented in a firm's financial report, namely the sustainability report, which is a practice of measuring, disclosing, and being accountable for the organization's performance in achieving sustainable development goals to both internal and external stakeholders (GRI, 2006).

Firm value has an important role for companies because it is the main benchmark for investors. When a firm goes public, the firm's value can be reflected by the market price. Therefore, increasing share prices is the goal of increasing the value of a firm. Indonesia's economy is largely driven by increased household consumption and one of the industries that is growing rapidly is the food and beverage industry (kemenkeu.go.id, 2021). The food and beverage industry, which is a subsector of the non-oil and gas processing industry, is

the largest contributor to national GDP, reaching 7.02%. This will affect a person's consumption and investment patterns, the greater the GDP, the higher the amount of funds to invest in the capital market. So the higher the level of demand for shares will increase the value of the firm (kemenperin.go.id, 2021). Based on the data, there are several factors that are thought to influence firm value, namely liquidity, profitability, firm size and sustainability report disclosure.

The share price is likely to be high as expected, if the value of the liquidity ratio looks good and this condition continues in a stable manner, the level of the firm's ability to pay its short-term obligations will be higher, this will provide a good signal or good news to investors which will ultimately result in investors are interested and this results in an increase in firm value. The higher the Current Ratio (CR), the firm is in good condition, thus having a positive impact on firm value [1]. The results of research that has been conducted by [2] show that the Current Ratio (CR) has a positive effect on firm value. While the research conducted by [3] shows that the Current Ratio (CR) has no effect on firm value.

The next aspect that is thought to influence firm value is profitability. Profit is important for a firm, because with firm profits it can provide welfare for managers and shareholders [1]. One measure of profitability is Earning Per Share (EPS). The greater the value of Earning Per Share (EPS), the greater the return investors will get, causing demand for shares to increase. The results of research conducted by [4] show that Earning Per Share (EPS) has a positive effect on firm value, because Earning Per Share (EPS) is a measuring tool that is often used in making decisions to buy or sell shares, therefore information about Earning Per Share (EPS) can influence firm value. In contrast to research conducted by [5] it shows that Earning Per Share (EPS) has no effect on firm value.

Another factor that is thought to influence firm value is firm size. According to [6] the larger the firm size, the firm value also increases and the bigger the firm, the easier it is for the firm to obtain internal and external funding sources. The results of research conducted by [7] stated that firm size influences firm value. This is contrary to research conducted by [8] which states that firm size has no influence on firm value.

Sustainability reports are also believed to increase reputation and trust for consumers, so that stakeholders including investors and business people, who are part of the global community, start to care, respond and provide organizational accountability in the form of sustainability reports. Therefore, the more disclosure of environmental performance, such as monitoring, prevention, correction and accountability carried out by companies towards the surrounding environment and ecosystem sustainability, the greater the value of the firm [9].

Literature Review

Signal Theory

Signaling theory was first introduced by Spence in his research entitled Job Market Signaling Spence (1973). Signals are given by companies regarding firm performance in financial and non-financial aspects and the performance achievements that have been achieved by management in realizing the expectations and decisions of employees shareholders.

The Effect of Current Ratio (CR) on Firm Value

When investing their funds, investors will be influenced by the high and low Current Ratio (CR). If a firm has a high level of liquidity then the firm is in good condition so it will increase demand for shares and of course will increase share prices [10]. So the more liquid a firm's is, the higher the share price, which will have an impact on the high value of the firm. This statement is in line with research conducted by [2] and [11] which found that liquidity has a positive effect on firm value.

H1: Current Ratio has a positive effect on firm value

The Effect of Earning Per Share (EPS) on Firm Value

Earning Per Share (EPS) value is used as basic information that is often used by investors to see the level of success of a firm in obtaining net profits that are ready to be distributed to shareholders. Companies that have a high level of net profit reflect good performance in the eyes of investors. The greater the value of Earning Per Share (EPS), the greater the returns obtained by investors, causing demand for shares to increase. High demand for shares causes share prices to rise and this will increase the firm value as measured by share prices [4]. This is in line with the results of research conducted by [2] and [4] which found that profitability has a positive effect on firm value.

H2: Earning Per Share (EPS) has a positive effect on firm value

The Effect of Firm Size on Firm Value

Big firms have more investor confidence compared to small companies because large firms are considered to have stable conditions making it easier for firms to obtain capital. High flexibility and accessibility in funding is influenced by the large size of the firm, meaning big firms are easier and have a lot opportunity to access capital markets, this will make investors interested in investing their capital. The greater the firm's assets, the more well-known it is society which means it is easier to get information that will increase firm value [6]. This statement is in line with research conducted by [7] and [3] which found that firm size has a positive influence on firm value.

H3: Firm Size has a positive effect on firm value

The Effect of Sustainability Report in Moderating Current Ratio (CR) on Firm Value

If a firm's liquidity is good, it will be more successful in generating profits, which will have a positive impact on its market value. Sustainability Reports are the solution for more detailed reports if companies want to attract investors. The Sustainability Report is intended to show the firm's commitment to meeting short-term obligations and increasing firm value by increasing the liquidity value. That means it's getting higher value, the more it maintains the value of liquidity, so that provide a good signal for investors [12].

H4: Sustainability reports can moderate the influence between current ratio (cr) and firm value

The Effect of Sustainability Report in Moderating Earning Per Share (EPS) on Firm Value

Investors use profit-generating companies can be relied upon as a benchmark for evaluating firm value. The higher the firm's profitability, the greater its market value. When the firm value increases, investor interest will also increase. Disclosure of sustainability reports is a form of firm commitment to sustainability reporting. The higher the disclosure

of a firm's sustainability report in improving the environment, the higher the firm value will be because investors invest their shares in the firm. This matter because investors are more interested in investing in an environmentally friendly business that will add value for investors if they believe that the business will continue developing and sustainable [13].

H5: Sustainability reports can moderate the influence between earning per share (eps) and firm value

The Effect of Sustainability Report in Moderating Firm Size on Firm Value

Larger firms are considered capable of managing management more efficiently and successfully than the smaller companies that create them it is easier to attract investment from investors. Besides To attract the interest of potential investors, companies need to contribute more in disclosing sustainability reports by improving performance that can benefit the internal and external environment. There is a sustainability report is a form of responsibility report environmental and social issues are expected to provide signals positive impact on firm performance, so it can increasing firm value [12].

H5: Sustainability reports can moderate the influence between firm size and firm value

Based on the description above, it can be built research framework as follows:

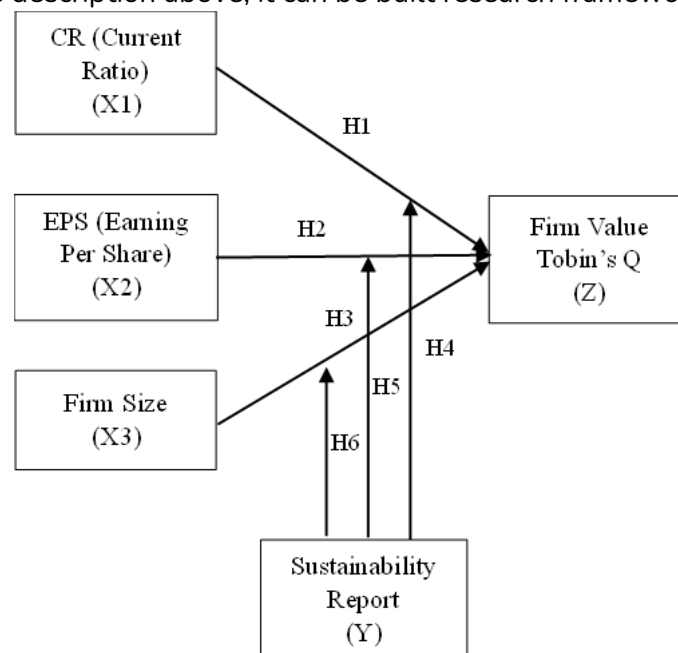


Figure 1: Conceptual Framework

METHOD

Types of research

The method used in this research is a quantitative method.

Location and Time of Research

This research was conducted in Cimahi, West Java. To obtain data and information on food and beverage subsector companies for the 2020-2022 period in this research,

researchers used the official website of the Indonesia Stock Exchange (BEI), Central Statistics Agency (BPS) as well as documentation methods through books and journals.

Sampling technique

The sampling technique used in this research is purposive sampling, namely a technique for determining samples with certain considerations. The following criteria are used in determining the sample in this study as follows:

Table 1. Research Sample Criteria

No	Description	Total
1.	Food and beverage subsector firms listed on the Indonesia Stock Exchange for the 2020-2022 period.	88
2.	Food and beverage subsector firms that do not consistently publish financial reports and disclosure sustainability reports for the 2020-2022 period.	(76)
The total of firms that can be sampled		12
Research year		3
Total research data		36

Types of Research Data

The dependent variable in this study is Firm value (TOBIN'S Q) and the independent variables are current ratio, earning per share and firm size moderated by sustainability reporting. Measurements for each variable used are in Table 2

Table 2. Operational Definition of Research Variables

No.	Variable	Definition
1.	Firm Value	Firm value is a financial performance shown by share prices which can shape demand and supply in the capital market. In this study, firm value is measured using Tobin's Q [Latif et al., 2023]. $NP = \frac{EMV+D}{EBV}$
2.	Current Ratio	Current Ratio is a ratio that compares the firm's current assets with short-term debt. The formula used to calculate Current Ratio [Sutrisno, 2017]. $CR = \frac{\text{Aktiva Lancar}}{\text{Hutang Lancar}} \times 100\%$
3.	Earning Per Share	Earning Per Share is a measure of a firm's ability to generate profits per owner's share. The formula used for calculate Earning Per Share [Nafisah et., al., 2020]. $EPS = \frac{\text{Laba Bersih}}{\text{Harga Saham Beredar}}$
4.	Firm Size	Firm size is a size, scale, or variable that describes the size of a firm in various ways, which can be seen from total assets, total income and market capitalization. Firm size can be calculated using the following formula [Ristiani & Sudarsi, 2022].

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		Size = Ln (Total Aset)
5.	Sustainability Report	The Sustainability Report is a report that contains financial and non-financial performance information regarding social and environmental activities that enable the firm to grow sustainably [D. K. Sari & Wahidahwati, 2021]. $SRDI = \frac{V}{M}$

To test the hypotheses H1 to H6, the regression equation model is used as follows:

$$NP = \alpha + \beta_1 CR + \beta_2 EPS + \beta_3 Size + \beta_4 SR + \beta_5 CR * SR + \beta_6 EPS * SR + \beta_7 Size * SR + e$$

Information:

- NP : Firm value
- CR : Current Ratio
- EPS : Earning Per Share
- SIZE : Firm size
- SR : Sustainability Report
- A : Firm Measure
- B : Coefficient
- E : Error

RESULT AND DISCUSSION

Descriptive statistics

Table 3. Results of Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
CR	36	0.103	8.800	2.294	2.191
EPS	36	-14.660	1024.0	158.43	217.57
SIZE	36	27.960	31.316	29.858	1.170
SR	36	0.000	1.000	0.488	0.268
NP	36	0.533	3.684	1.321	0.716

Source: Eviews 12

Based on Table 3 above, it can be seen that the sample size for this study is 36. The minimum value for this firm value is 0.53, but the maximum value obtained is 3.68. The average firm value of all companies listed on the Indonesia Stock Exchange from 2020 to 2022 is 1.32 with a standard deviation of 0.71. The minimum current ratio value is 0.10 and the maximum value is 8.80. The average value is 2.29 and the standard deviation is 2.19. The minimum value of earnings per share is 14.66, the maximum value is 1024.0, the average value is 158.4 and the standard deviation is 217.5. The minimum value for firm size is 27.96, the maximum value is 31.31. The average value is 29.85 and the standard deviation is 1.17. The minimum value for sustainability reporting is 0.00 and the maximum value is 1.00. The average value is 0.48 and the standard deviation is 0.26.

Hypothesis test

This research uses multiple regression analysis, namely to determine the direction of the correlation between variables, whether the independent variable has an effect on the dependent variable. The results of the regression analysis using significance level of 5% are shown in Table 4:

Table 4. Significance and Coefficient Result

	Coefficient	P-Value	Relation between Variabel	Result
CR	0.086	0.276	Not Significant	Rejected
EPS	0.001	0.021	Significant Positive	Accepted
SIZE	-1.595	0.000	Significant Negative	Accepted
SR*CR	0.117	0.278	Not Significant	Rejected
SR*EPS	-0.002	0.024	Significant Negative	Accepted
SR*SIZE	0.294	0.178	Not Significant	Rejected

Source: Eviews 12

The result of the first hypothesis regression test based on the output coefficient and significance indicate a p value of 0.276 more than 0.05 and a coefficient of 0.086, so its show that the validity of the first hypothesis is not significant. These results indicate that Liquidity were not statistically significant effect on Firm value. This conclusion suggests that the level of the current ratio, whether high or low, does not affect the firm's value. A decrease in the firm's value does not necessarily result from issues related to the firm's ability to meet its short-term liabilities. However, excessive liquidity is also not desirable because it indicates idle funds (non-productive assets), implying a lack of capital turnover to generate profits or benefits for the firm. These results are in line with research [3] and [7] States that the Current Ratio (CR) does not influence the firm's value.

The outcomes obtained from the second hypothesis regression test, based on the output coefficient and significance, show a p-value of 0.021, which is less than 0.05, and a coefficient of 0.001. These findings suggest that Profitability has a positive and statistically significant effect on the Firm's value. The more valuable the Earnings Per Share (EPS), the higher the returns for investors. This boosts demand for shares, causing stock prices to rise and, in turn, increases the firm's overall value measured by stock prices. These results are in line with research [2] and [4] which found that Earning Per Share has a positive and significant on firm value.

The regression test for the third hypothesis, based on the output coefficient and significance, indicate a p-value of 0.000, which is less than 0.05. The coefficient was - 1.595. These results indicate that firm size has a negative and significant effect on firm value. This implies that the size of a large firm cannot be used as a benchmark for the performance of a firm, as more valuable companies have higher responsibilities in managing their performance and are expected to optimize their resources. When a corporation with a substantial amount of assets fails to utilize them efficiently, it can lead to

hoarding, thereby decreasing the firm's value. These findings are in line with research [16], which have similarly found that firm size has a negative impact on firm value.

Based on the output coefficient and significance, the fourth hypothesis reveals a p-value of 0.278, which is less than 0.05 and a coefficient of 0.117. leading to the rejection of hypothesis 4. Short-term creditors are more interested in the firm's cash flow and working capital management than in the magnitude of the profits earned by the firm. The introduction of a sustainability report is unable to significantly moderate the influence of liquidity on the firm's value because short-term creditors focus on financial statements without considering non-financial reports that contains social and environmental activities in lending decisions. In making investment decisions, an investor does not heavily consider the current ratio factor held by a firm. The presence of sustainability reporting cannot foster investor interest. These results are in line with research conducted by [17] stated that the sustainability report was unable to moderate the influence between CR and firm value.

Based on the output coefficient and significance, the fifth hypothesis regression test reveals a p-value of 0.024 less than 0.05 and a coefficient of -0.002. The findings suggest that the Sustainability Report may have the potential to mitigate the association between Earning Per Share and Firm Value. The hope is that sustainability reporting will increase investor interest in buying shares, as sustainability reports can help investors understand how a firm is managed. However, for investors that focusing on long-term business practices, sustainability reporting may be considered a more important factor than the profits reflected by Earnings Per Share (EPS). Therefore, the more comprehensive the disclosure in the Sustainability Report, the lower the level of firm profitability, which can decrease the firm's value.

The results of regression test for the sixth hypothesis that based on the output coefficient and significance, the p-value is 0.178, which is higher than 0.05, and the coefficient is 0.294. These findings suggest that the Sustainability Report cannot alter the correlation between Firm Size and Firm Value, leading to the rejection of sixth hypothesis. The findings of this research imply that firm size will play a crucial role in controlling its success. When a firm with a large amount of assets fails to utilize them effectively, its firm value declines, and investors hold a negative perception of the firm. When investors view a firm negatively, the Sustainability Report cannot convince them to invest. These findings are in line with research [12], which also found that disclosure of sustainability reports was unable to moderate firm size on firm value.

CONCLUSION

This research aims to determine the effect of the current ratio, earnings per share, and firm size on the firm's value, with sustainability reporting as a moderating variable. The results of this study indicate that earnings per share (EPS) has a positive and significant effect on the firm's value, while firm size (SIZE) has a negative and significant effect on the firm's value, and the current ratio (CR) does not have a significant effect on the firm's value. Sustainability reporting can moderate the correlation between EPS and the firm's value, but it cannot moderate the correlation between CR, SIZE, and the firm's value. Based on the

results of the research above, there are several suggestions that researchers can provide that might be useful, with some of these suggestions as follows: The hope is that this research can serve as a consideration for companies to not only focus on profits but also to take responsibility for the surrounding environment, ensuring effective and sustainable operations. As a crucial consideration for investors in making investment decisions, it allows them to identify companies that not only provide profits but also have a responsibility towards the surrounding environment. As input for further research, it serves as valuable information regarding factors influencing the firm's value besides financial performance, including both internal and external factors.

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