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THE MODERATING EFFECT OF FIRM SIZE ON THE RELATIONSHIP BETWEEN FINANCIAL VARIABLES AND EARNING RESPONSE COEFFICIENT

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ABSTRACT

This study aims to examine the effect of dividend payout ratio, leverage, and profitability on earning response coefficient with firm size variables as moderators. The sample in this study uses a purposive sampling technique with a sample number of 80 data. The data processing in this study uses EVIEWS 13 to test the hypothesis that has been established. The results showed that the dividend payout ratio had an effect on the earning response coefficient, while leverage and profitability showed that there was no effect on the earning response coefficient, and the firm size was able to moderate the dividend payout ratio to the earning response coefficient, and the firm size was unable to moderate the leverage and profitability to the earning response coefficient. Overall, the variables studied in this study were able to explain 71.7% of the earning response coefficient.

KEYWORDS: *Earning Response Coefficient, Dividend Payout Ratio, Leverage, Profitability, Firm Size*

1. INTRODUCTION

Financial statements are records of a company's financial information that describe its performance in an accounting period (Sujarweni, 2017). Initially, financial statements were used to verify financial flows, but over time, these reports became the basis for assessing a company's financial position. Financial statement analysis is important for investors in making investment decisions, as it provides an overview of the company's growth and development.

PSAK No. 1 states that the purpose of financial statements is to provide information about a company's financial position, performance, and cash flow to help users of the report make economic decisions. Disclosure in financial statements, as stipulated in PSAK 60, allows users to evaluate the impact of financial instruments on the company's financial position and performance as well as the risks faced. Wider voluntary disclosure can enhance a company's credibility and help investors understand the management business strategy.

To face fierce competition, companies are faced with the condition of being more transparent in disclosing their company information, so that it will be more helpful for decision-makers in anticipating changing economic conditions. How important the company's financial reporting is for investors can be shown from the completeness and how voluntary disclosure in the financial statements is presented by each company. This will make investors tend to have an interest in investing in companies whose financial statements not only display mandatory disclosures but also voluntary disclosures. A company that presents a wider disclosure of the required terms will be useful as a guide to investors about the company's capabilities that make the company superior to other companies.

Investing is one way to develop and grow assets. The main goal of investors investing is to obtain dividends from stocks and capital gains in the form of an increase in stock prices. However, in making investment decisions, investors must be careful because mistakes in choosing investments can result in the loss of invested capital. Therefore, it is important for investors to gather complete and precise information about the company to choose as a place to invest. One measure to assess a company's financial performance is to look at the profits generated by the company.

When profit information is announced, the market already has expectations about how big a company's profit will be based on publicly available information. The difference between expected earnings and reported earnings

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is called unexpected earnings. Surprise earnings provide information that has not been reflected in the market, so the market will react to the announcement, which can be seen from the change in the company's stock price (return) (Ramadani & Mulyati, 2019). The strength of the market's reaction to profit information can be seen from the high Earnings Response Coefficient (ERC). A high ERC indicates that the reported returns are considered quality and used by investors in investment decision-making. In theory, if the announcement contains relevant information, the market will react to changes in the price of the security, which will ultimately affect the returns investors receive (Ramadani & Mulyati, 2019).

Financial statements, as a source of information about the company's financial condition, have a very important role in decision-making by stakeholders. The profit information contained in the financial statements will greatly affect investment decisions in the capital market. Both positive and negative profits generated by the company will affect the market response and stock price movements (Serlindawati & Chairunisa, 2024).

Table 1
Information on Market Response to 2023 Profit

No	Company Code	2023				
		Reporting Date	H-3	H	D+3	Profit
1	CEKA	March 18, 2024	1980	1990	2000	153,574
2	DLTA	March 27, 2024	3370	3390	3300	199,611
3	ICBP	March 25, 2024	11225	11200	11600	8,465,123
4	MYOR	February 28, 2024	2410	2440	2450	3,244,872
5	ROTI	February 28, 2024	1240	1195	1205	333,300
6	BUDI	March 27, 2024	272	274	272	333,300
7	ULTJ	March 26, 2024	1700	1840	1870	1,186,161
8	AISA	March 27, 2024	132	132	122	18,796
9	ALTO	June 14, 2024	9	8	9	(25,917)
10	ANDI	March 27, 2024	50	37	28	(66,239)

Source: Financial Statement Data processed, 2024

Based on Table 1, the market reaction to the announcement of the 2023 financial statements of various companies shows a variety of results, which can be seen from the changes in stock prices before and after the financial statements are announced. Some companies, such as PT. Wilmar Cahaya Indonesia, PT. Indofood CBP Sukses Makmur, and PT. Ultrajaya Milk Industri, showed a significant positive reaction after the announcement of the financial statements. For example, at PT. Wilmar Cahaya Indonesia, the company's share price increased from 1,980/share before the announcement of the financial statements to 2,000/share after the report was announced, with a profit of Rp. 153,574 million. This increase in the stock price shows that the market is responding enthusiastically to the company's profit information. Likewise with PT. Indofood CBP Sukses Makmur, which experienced an increase in its share price from 11,225/share to 11,600/share after the announcement of financial statements which showed a profit of Rp. 8,465,123 million.

Here, the market reacts very positively, reflecting that the reported profit is considered relevant and reflects the solid performance of the company. However, not all companies experience a positive reaction. PT. Delta Djakarta, despite recording a profit of Rp. 199,611 million, experienced a decline in its share price from 3,370/share to 3,300/share after the announcement of its financial statements. This shows that even though the announced profit is quite high, the market does not see it as positive enough information to push the stock price up. On the other hand, PT. FKS Food Sejahtera also shows a similar phenomenon. The company's share price remains at the same figure at the time of the announcement of the financial statements and then drops after the

report is announced. This indicates that the market may not be interested enough in the company's financial statements, or the profits recorded are not enough to attract investors' attention.

There are also companies that experienced a significant decline in stock prices after the announcement of financial statements, such as PT. Tri Banyan Tirta, which recorded a loss of Rp. 25,917 million, and its share price fell from 9/share to 8/share. The market reaction to companies reporting losses tends to be negative, suggesting that the market responds poorly to unfavorable information, such as losses. The same thing happened to PT. Andira Agro, which reported a loss of Rp. 66,239 million. Its share price fell from 50/share to 28/share after the announcement of the financial statements.

This sharp decline in the stock price reflects that the market sees the company in poor financial condition, and investors tend to avoid investing in companies that suffer heavy losses. Overall, this data shows that the market response to profits announced by companies is not always linear. Sometimes, a positive profit alone is not enough to push the stock price up if other factors are not supportive, such as market expectations that are not being met. Conversely, a profit that is less than expected or even a loss can cause the stock price to drop significantly. Therefore, companies need to pay attention to how their financial information is presented to the market and how external conditions and market expectations may affect the response to their financial statements.

Every company gets a market reaction to the profit information provided, supported by a signal theory that explains that profit or loss information will affect investors' evaluation of investment decisions. This phenomenon shows that an increase in profits is not always followed by an increase in stock prices. Each issuer has a different sensitivity in responding to profits, which is reflected in the value of the Earnings Response Coefficient (ERC). If the market responds strongly to the earnings announcement, the ERC value is high, while if the market response is weak, the ERC is low. The market reaction depends on the quality of the reported profit, and the ERC reflects the magnitude of the market's return on the announced unexpected profit, indicating that quality earnings have greater response power.

According to (Scoot, 2015), Earnings Response Coefficient (ERC) is used as a tool to measure the market response to profit information published by companies. The ERC value generated by each company's securities will vary due to various factors, including dividend payout ratio, leverage, profitability and firm size.

The Dividend Payout Ratio (DPR) is an important factor considered in the company's policy regarding dividend distribution. If the entire profit is paid as dividends, the company has no reserves for reinvestment. On the other hand, if profits are fully maintained, the interests of shareholders can be ignored, and the company can lose new investors (Widayanti, 2020). Research by Maulana et al., (2024) found that the House of Representatives has a positive and significant effect on the Earnings Response Coefficient (ERC), where any increase in dividends will trigger a market reaction. However, Pandana & Santioso's (2020) research shows that the House of Representatives has no effect on the ERC because investors prioritize the future of the company and its operational performance, assuming that undistributed profits as dividends are used to increase the company's effectiveness and profits.

Leverage measures how much of a company's assets are financed with debt. According to Debora & Ardiansyah (2019), companies with high debt levels will have an interest expense that can reduce the tax burden. Sari et al.,, (2021) define leverage as a comparison between debt and corporate capital for operational financing. The larger the leverage ratio, the higher the risk of defaulting on debt obligations due to the greater interest expense. Research by Debora & Ardiansyah (2019) shows that leverage has an effect on Earnings Response Coefficient (ERC), because the use of debt for funding increases the company's working capital and productivity, which in turn increases the market response to the company's profit. In contrast, Angela & Iskak's (2020) research concludes that leverage has no effect on ERC, because corporate debt is generally a short-term source of funding that does not necessarily reflect the company's ability to pay off these obligations.

Profitability measures the company's ability to generate profits from operational activities in the accounting period (Serlindawati & Chairunisa, 2024). Investors invest to get returns, and the higher the profit a company generates, the greater the return received, which increases the value of the company. This shows that successful management in managing company assets tends to generate good profits. Research by Sipahutar et al., (2023) found that profitability affects Earnings Response Coefficient (ERC), because companies with high profitability have larger ERCs. Profits are the main focus for investors, so high profitability increases market attention. In

contrast, the research of Hakim et al., (2023) shows that profitability has no effect on ERC, as investors may focus more on the risks faced by the company than on the level of profitability.

Firm size measures the size of a company, which can be described through its operating activities and revenue earned, usually proxied by the logarithm of total assets. The larger the total assets of a company, the more it shows the stability and ability of the company to generate profits (Mahdiana & Amin, 2020). Research by Sasongko et al., (2020) found that firm size affects Earnings Response Coefficient (ERC), because large companies tend to have higher requests for information from the public, as well as better innovation capabilities by utilizing existing assets. On the other hand, Dewi's research (2020) shows that company size has no effect on ERC, because large companies do not always generate large profits, and small companies can also provide significant profits.

2. LITERATURE REVIEW

2.1. Signalling Theory

Signal theory, first coined by Michael Spence (1974), explains that the sender of information (the owner of the information) provides relevant signals to the receiver, which then adjusts its behavior based on the signal. Brigham & Houston (2013) stated that signal theory describes the behavior of company management in giving investors clues about the company's future prospects. This theory emphasizes the importance of information issued by companies in making investment decisions. Relevant, accurate, and timely information is needed by investors as an analysis tool. In addition, a well-managed company will give a positive signal to the market, which can attract investors to invest. One form of disclosure that can give a positive signal is the annual report, which presents relevant and transparent financial and non-financial information.

2.2. Earning Response Coefficient

Earnings Response Coefficient (ERC) is a measure of abnormal returns that a security receives in response to unexpected earnings reported by companies (Scott, 2015). The market's reaction to earnings information varies between companies, where the market responds more strongly to good or bad news from a particular company. Factors that affect ERC according to Scott (2015) include: 1) Stock Risk (Beta), where the higher the risk of a company's future return, the lower the investor reaction to surprise profits, 2) Capital Structure, where companies with large debts have a lower ERC because profits are more widely used to guarantee debt security, 3) Profit Persistence, where ERC is higher if current profits show future sustainability, 4) Growth Opportunities, where profits that reflect the company's growth potential will increase the ERC, and 5) Price Informative Level, where the more information is reflected in the stock price, the lower the ERC, as the profit provides less information added value. Earnings Response Coefficient Formula (Scoot, 2015):

$$\mathbf{CARit = \alpha + \beta\ UEit - \varepsilon}$$

Information:
CARit = Cummulative Abnormal Return of the company i during t days and after the profit is published.
α = Constant
β = Earnings Response Coefficient in company i in year t.
UE= Unexpected Earnings
ε = Error component in the model of company I in the period t

2.3. Dividend Payout Ratio

Dividend Payout Ratio is the ratio of the total amount of dividends paid to shareholders. Bringham & Houstan (2019:85). Ross (2002:496) states that dividends can be distributed to registered shareholders on a specific date. When a dividend has been announced, it becomes an obligation of the company and cannot be easily canceled by the corporation. The dividend amount is expressed in dollars per share as a percentage of the market price and as a percentage of earnings per share.

In this study, the Dividend Policy uses the Dividend Payout Ratio. The dividend payout ratio determines the amount of profit divided in the form of cash and retained earnings as a source of funding. This ratio shows the percentage of the company's profit paid to the company's ordinary shareholders in the form of cash dividends from Zuraida, (2019).

$$\boldsymbol{DPR = \frac{\text{Dividen Per Share}}{\text{Earning Per Share}}}$$

2.4. Leverage

Leverage is a ratio that measures the extent to which a company's assets are financed with debt, which reflects the company's debt burden compared to the assets held (Kasmir, 2018). The higher the leverage ratio, the greater the

investment risk, while companies with low leverage ratios have lower risk (Natalie & Lisiantara, 2022). This ratio shows the influence of debt on the company's asset management. If the leverage ratio is high, the company may have difficulty obtaining further loans due to concerns about not being able to pay the debt. The use of leverage can increase the value of the company because debt interest can be deducted in tax calculations (Ilyas & Hertati, 2022).

One of the commonly used leverage ratios is the Debt to Total Assets Ratio (DAR), which measures the ratio between the company's total debt and total assets. The higher this ratio, the greater the company's dependence on long-term debt and the higher the risk faced (Santoso & Junaeni, 2022; Ilyas & Hertati, 2022). The formula used to measure the Debt to Total Assets Ratio (DAR) is:

$$DAR = \frac{\textbf{Total Debt}}{\textbf{Total Asset}}$$

2.5. Profitability

Profitability is a ratio to assess a company's ability to generate profits. This ratio is used to compare various components in the balance sheet and profit and loss financial statements, with the aim of looking at the company's development in a certain period and analyzing the changes that occur (Kasmir, 2018).

One of the ratios used to measure profitability is Return on Assets (ROA). ROA measures the extent to which a company can generate profits from the assets it owns. The greater the ROA, the more effective the company will be in generating profits with existing assets (Dina & Wahyuningtyas, 2022). The formula for measuring ROA is:

$$ROA = \frac{\textbf{Net Income}}{\textbf{Total Asset}}$$

2.6. Firm Size

According to Pratama and Soekotjo (2020), the size of a company can be seen from several aspects, such as asset value, equity, and sales. The larger the total assets owned by a company, the larger the size of the company. The size of the assets shows how much capital is needed to finance the company's operational activities (Rosdiana & Mulyani, 2023).

Companies are generally divided into three categories based on their operational scale, namely small firms, medium size companies, and large firms. The size of a company reflects the financial characteristics of that company. Larger companies that have stable or established finances tend to have an easier time obtaining capital in the capital market than smaller companies. This is because large companies have higher flexibility. In this study, the size of the company is measured using the log (Ln) of the company's total assets (Rosdiana & Mulyani, 2023).

2.7. Hypothesis Development

2.7.1. The Effect of Dividend Payout Ratio on Earning Response Coefficient

According to Lestari & Harnida (2020), the dividend policy is related to the company's decision to distribute profits to shareholders. High dividends can increase the stock price and the value of the company. Based on signal theory, dividend distribution gives a positive signal to investors that the company is making good profits. The research of Maulana et al., (2024) shows that the dividend payout rati2o has a positive effect on the earning response, while Pandana & Santioso (2020) concludes that there is no significant influence because investors prioritize the company's future. Based on this explanation, the hypotheses that can be formulated are:

H1: Dividend Payout Ratio Has a Positive Effect on Earning Response Coefficient

2.7.2. The Effect of Leverage on Earning Response Coefficient

Leverage is the ratio between total liabilities and total assets that reflects the level of debt of a company. A high leverage ratio indicates a larger proportion of debt to assets, which increases the risk of manipulation. Kasmir (2018) stated that companies with high leverage tend to carry out profit management because large debt burdens, including interest, can reduce profitability. According to signal theory, debt funding signals investors about the company's obligations that influence investment decisions. Research by Debora & Ardiansyah (2019) concluded that leverage has an effect on earning response coefficient (ERC), with debt funding increasing profitability and market response. However, Angela & Iskak's (2020) research shows that leverage has no effect on ERC, because debt is often in the form of short-term funding that is not always considered in the creditor's assessment. Based on this explanation, the hypotheses that can be put forward are:

H2: Leverage has a positive effect on earning response coefficient

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2.7.3. The Effect of Profitability on Earning Response Coefficient

Profitability reflects the company's ability to generate profits and is an indicator of management effectiveness (Kasmir, 2018). The higher the profitability ratio, the better the company's performance in generating profits, which investors consider in evaluating the company's performance. Based on the signaling theory, profitability gives a positive signal to investors, where companies with high profitability levels are considered capable of providing greater profits. The research of Sipahutar et al., (2023) shows that profitability has a positive effect on earning response coefficient (ERC), while the research of Hakim et al., (2023) found that profitability has no effect on ERC because investors are more focused on the risks faced by companies.

H3: Profitability has a positive effect on earning response coefficient

2.7.4. Firm Size Moderates Dividend Payout Ratio to Earning Response Coefficient

The size of the company is a factor that affects the company's performance, with large companies tending to be more trusted by investors because they are considered capable of improving their performance on a sustainable basis. Large companies typically have larger total assets, making them more attractive to investors. Good performance allows companies to generate quality profit information, which makes it easier for investors and creditors to analyze and make decisions. Announced earnings information often gets a positive response from the market, especially for large companies that are considered more stable and reliable. Therefore, the larger the size of the company, the higher the attention of investors, and the higher the earning response coefficient (ERC). Based on the signaling theory, large companies give signals that they are able to survive the competition and attract the attention of investors, so that the value of their shares continues to grow. Research by Husiano & Suratno (2022) also shows that the dividend payout ratio has a significant effect on ERC, where the dividends distributed increase investor confidence and provide a return on stock ownership.

H4: Firm Size Moderates Dividend Payout Ratio to Earning Response Coefficient

2.7.5. Firm Size Moderates Leverage Against Earning Response Coefficient

The size of a company can be measured through the value of assets, equity, sales, and other factors, with total assets as the main indicator describing the size of the company and the need for capital for opera2tions (Pratama & Soekotjo, 2020; Rosdiana & Mulyani, 2023). The larger the total assets of a company, the more stable and good the condition, so that it is more able to generate profits than companies with smaller assets (Mahdiana & Amin, 2020). Leverage, according to Kasmir (2018), is a ratio that shows the relationship between a company's debt and its capital, which describes the extent to which the company is financed by debt compared to its own capital. Based on the signaling theory, leverage is the main source of funding which is also an obligation that must be fulfilled by the company, encouraging the company to be more productive in generating profits to fulfill these obligations. Santoso and Junaeni (2022) emphasized the importance of proper leverage management to increase company value, including through income tax reductions.

H5: Firm Size Moderates Leverage Against Earning Response Coefficient

2.7.6. Firm Size Moderates Profitability Against Earning Response Coefficient

Companies with larger and more stable finances have an easier time obtaining capital in the capital market than small companies, because they have higher flexibility in managing resources and funding opportunities (Rosdiana, 2023). Profitability reflects the influence of a combination of liquidity, asset management, and debt on operating results. Profitability is an important factor in determining a company's capital structure, because companies with high profitability tend to use relatively small debt, relying on retained earnings for funding (Huanency & Wijaya, 2023). Thus, a high level of profitability indicates better company performance, while low profitability indicates less than optimal performance.

H6: Firm Size Moderates Profitability Against Earning Response Coefficient

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3. RESEARCH METHODS

3.1 Variable Operations

Table 2
Variable Operations

It	Variable	Formula	Measurement Scale
1	Earning Response Coefficient (Y) (Scott, 2015)	**CARit= α + β UEit – ε**	Ratio
2	Dividend Payout Ratio (X1) (Zuraida, 2019)	$DPR = \frac{\text{Dividen Per Share}}{\text{Earning Per Share}}$	Ratio
3	Leverage (X2) (Ilyas & Hertati, 2022)	$DAR = \frac{\text{Total Debt}}{\text{Total Asset}}$	Ratio
4	Profitability (X3) (Serlindawati, 2024)	$ROA = \frac{\text{Net Income}}{\text{Total Asset}}$	Ratio
5	Firm Size (Z) (Rosdiana & Mulyani, 2023)	**Company Size = Ln (Total Assets)**	Ratio

3.2 Research Population and Sample

According to Sugiyono (2019), a population is a generalization area consisting of objects or subjects that have certain qualities and characteristics that are determined by the researcher to be studied and then drawn conclusions. In this study, the population used is Food and Beverage companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period, with a total of 91 companies.

Samples, according to Sugiyono (2019), are part of the data taken from the population using certain methods. This study uses a non-probability sampling method, which is a sampling technique that does not provide an equal chance for each member of the population to be selected. The type of non-probability sampling used is purposive sampling, where sample selection is carried out based on criteria that are adjusted to the purpose or needs of the research. The criteria used to determine the sample are presented in the following table.

Table 3
Research Sample Criteria

No	Criterion	Sum
1	Food and Beverage Subsector Companies listed on the Indonesia Stock Exchange	91
2	Companies that have not yet IPO in 2019 - 2023	-38
3	Companies that suffered losses in 2019 - 2023	-26
4	Companies that did not pay dividends in 2019 - 2023	-11
5	Sample number of companies in the Food and Beverage Subsector	16
6	The amount of data processed during 5 Research Years (2019 - 2023)	80

3.3 Data Analysis Methods

The data analysis method used in this study is panel data regression analysis with the help of the Eviews 13 program. An inferential statistical analysis was carried out with the aim of analyzing data samples and applying them to the population. In this case, the applied inferential statistical method is panel data regression analysis, which is a combination of *time series* and *cross section* data. A *time series* data is a collection of data collected over time for a single individual, while *a cross section* is a collection of data collected at one time for many individuals. For the estimation of the panel data model, this study uses three methods, namely Pooled Least Square (Common Effect), Fixed Effect method, and Random Effect method.

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4. RESULTS AND DISCUSSION

4.1 Model Conformance Test

4.1.1 Chow Test

Table 4
Chow Test Results

Redundant Fixed Effects Tests			
Equation: FEM			
Test cross-section fixed effects			
Effects Test	Statistics	D.F.	Prob.
Cross-section F	1.01204	(15,57)	0.4565
Cross-section Chi-square	18.8896	15	0.2188

Source: Data processed with EVIEWS 13, 2024

Based on table 4, the chow test shows that the p-value of the Chi-Square cross-section is 0.2188 greater than α (0.05), therefore the conclusion that the selected model is the *Common Effect Model (CEM) model.*

4.1.2 Hausmann Test

Table 5
Hausmann Test Results

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistics	Chi-Sq. D.F.	Prob.
Cross-section random	2.865563	7	0.8972

Source: Data processed with EVIEWS 13, 2024

Based on table 5 of the Hausmann test, the prob value of 0.8972 is greater than α (0.05), therefore the conclusion that the selected model is the *Random Effect Model (REM) model.*

4.1.3 Langrange Multiplier Test

Table 6
Langrange Multiplier Test Results

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided			
(all others) alternatives			
Test Hypothesis			
	Cross-section	**Time**	**Both**
Breusch-Pagan	0.152317	0.000190	0.152507
	-0.6963	-0.989	-0.6962

Source: Data processed with EVIEWS 13, 2024

Based on table 6, the langrange multiplier test shows that the prob value of 0.152507 is greater than α (0.05), therefore the conclusion that the selected model is the *Common Effect Model (CEM) model.*

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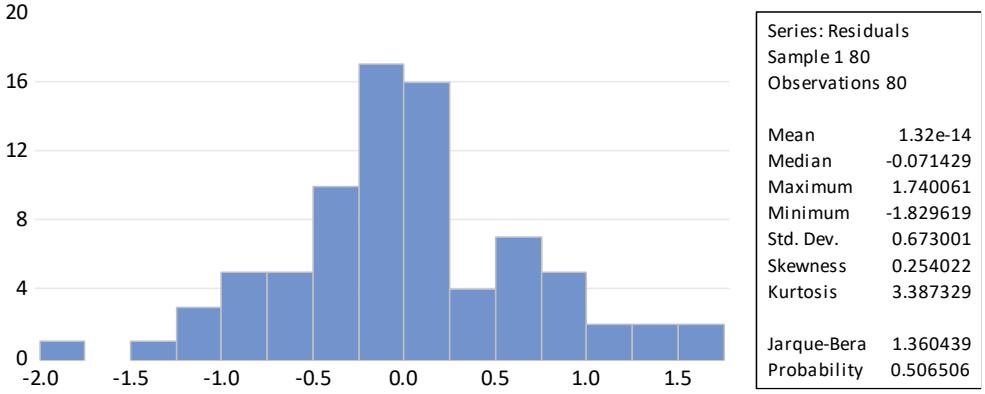
4.2 Normality Test

Figure 1
Normality Test Results



Source: Data processed with EVIEWS 13, 2024

Based on figure 1, the results of the normality test show a probability value of 0.506506 > 0.05, therefore the conclusion is obtained that H0 is accepted, which means that the data in this study is normally distributed.

4.3 Heteroscedasticity Test

Table 7
Heteroscedasticity Test Results

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
Null hypothesis: Homoskedasticity			
F-statistic	0.832811	Prob. F(16,63)	0.6448
Obs*R-squared	13.96657	Prob. Chi-Square(16)	0.6012
Scaled explained SS	14.86955	Prob. Chi-Square(16)	0.5342

Source: Data processed with EVIEWS 13, 2024

Based on table 7, the results of the heteroscedasticity test showed a prob value of 0.6012 > 0.05, therefore it was concluded that H0 was accepted, which means that the data in this study were distributed without heteroscedasticity symptoms.

4.4 Multicollinearity Test

Table 8
Multicollinearity Test Results

	Y	X1	X2	X3	Z_X1	Z_X2	Z_X3
Y	2.305522	-0.392844	0.016080	0.002121	-0.077341	0.023751	0.024742
X1	-0.392844	4.225826	-0.153810	0.059268	1.019887	0.007280	0.095967
X2	0.016080	-0.153810	0.135334	-0.017448	-0.008141	0.045518	0.012673
X3	0.002121	0.059268	-0.017448	0.007636	0.009983	-0.004805	-0.000201
Z_X1	-0.077341	1.019887	-0.008141	0.009983	0.360297	0.014377	0.016234
Z_X2	0.023751	0.007280	0.045518	-0.004805	0.014377	0.022289	0.011769
Z_X3	0.024742	0.095967	0.012673	-0.000201	0.016234	0.011769	0.026417

Source: Data processed with EVIEWS 13, 2024

Based on table 8, If the relationship between the independent variables has a correlation coefficient that exceeds 0.8, then there is a possibility of multicollinearity. If the correlation coefficient between independent variables does not exceed 0.8, then there is no tendency for multicollinearity to occur. Table 8 displays the test results to evaluate the presence of multicollinearity. Using the data from the table, we can see if there is any multicollinearity in the model being tested.

Based on the results of the multicollinearity test above, it can be concluded that all correlation coefficient values are still below 0.8 so that the data used in this study do not experience symptoms of multicollinearity.

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4.5 Test F

Table 9
Test Result F

R-squared	0.717289	Mean dependent var	3.162305
Adjusted R-squared	0.64549	S.D. dependent var	1.527974
S.E. of regression	0.909768	Akaike info criterion	2.834853
Sum squared resid	52.14368	Schwarz criterion	3.341034
Log likelihood	-96.3941	Hannan-Quinn criter.	3.037796
F-statistic	9.990156	Durbin-Watson stat	2.392399
Prob(F-statistic)	0.000		

Source: Data processed with EVIEWS 13, 2024

Based on table 9, the condition for making a decision regarding the F test is that if the significance value is less than 0.05, this indicates that the independent variable as a whole has a significant influence on the dependent variable, so it can be concluded that the hypothesis is acceptable. However, if the significance value exceeds 0.05, this indicates that there is no linear correlation between the independent variable and the dependent variable, so the hypothesis needs to be rejected.

4.6 R Square Test

Based on table 9, it can be concluded that the R-Square test value is 71.7%. This explains that the independent variable in this study was able to affect the dependent variable by 71.7%, while the other 28.3% was influenced by other variables that were not studied in this study.

4.7 Test T

Table 10
T Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.331177	4.56086	-0.07261	0.9423
X1	-0.332374	0.10818	-3.07243	0.0031
X2	0.396543	1.126633	0.351972	0.7260
X3	0.324952	1.695485	0.191657	0.8486
Z_X1	0.960902	0.367948	2.611514	0.0113
Z_X2	-1.460375	3.127583	-0.46693	0.6422
Z_X3	1.855378	2.347597	0.790331	0.4323

Source: Data processed with EVIEWS 13, 2024

Based on table 10, it can be seen that the dividend payout ratio variable has a prob value of 0.0031 < 0.05 so it can be concluded that the dividend payout ratio variable has an effect on the earning response coefficient and the first hypothesis is accepted. The leverage variable has a prob value of 0.7260 > 0.05 so it can be concluded that the leverage variable has no effect on the earning response coefficient and the second hypothesis is rejected. The profitability variable has a prob value of 0.8486 > 0.05 so it can be concluded that profitability has no effect on the earning response coefficient and the third hypothesis is rejected. The firm size variable that moderates the effect of dividend payout ratio on earning response coefficient has a prob value of 0.0113 < 0.05 so it can be concluded that firm size moderates the relationship between dividend payout ratio and earning response coefficient and the fourth hypothesis is accepted. The firm size variable that moderates the effect of leverage on earning response coefficient has a prob value of 0.6422 > 0.05 so it can be concluded that firm size weakens the leverage relationship with earning response coefficient and the fifth hypothesis is rejected. The firm size variable that moderates the effect of profitability on earning response coefficient has a prob value of 0.4323 > 0.05, so it can be concluded that firm size weakens the relationship between profitability and earning response coefficient and the sixth hypothesis is rejected.

4.8 Discussion

4.8.1 Effect of Dividend Payout Ratio on Earning Response Coefficient

The test results show that the dividend payout ratio has an effect on the earnings response coefficient (ERC), which means that the higher the dividend payout ratio, the greater the market's reaction to the reported profit. An

increase in dividends gives a positive signal to the market, which can increase the value of the company and the stock price. This finding is in line with signalling theory, which states that dividend policy is used by companies as a signal to inform financial conditions and future prospects. High dividend payments are often interpreted by investors as a sign of profit stability, which increases investor confidence and stock demand, thus affecting ERC. This research is supported by Maulana et al., (2024), Aini et al., (2020), and Khansa & Riwayati (2021).

4.8.2 Effect of Leverage on Earning Response Coefficient

The test results showed that leverage had no effect on earnings response coefficient (ERC), meaning that even if the company had high debt, it did not cause significant changes in the stock price or the market's response to earnings information. This suggests that the market does not pay much attention to earnings announcements when corporate debt is high enough, perhaps because the market already has internalized expectations regarding corporate debt management. This explanation can be based on signal theory, which states that although companies use debt to send signals about future quality and prospects, the market no longer considers it an important signal if it is familiar with the company's debt levels. Investors are more focused on other factors such as profitability and long-term growth potential. If debt is well managed, the market does not see it as a problem, which results in the market's response to leverage-influenced earnings announcements being low. These results are supported by research (Angela & Iskak, 2020), (Septiano et al., 2022), and (Sarahwati & Setiadi, 2021) which conclude that leverage has no effect on ERC.

4.8.3 The Effect of Profitability on Earning Response Coefficient

The test results showed that profitability had no effect on earnings response coefficient (ERC), which means that even if the company made a high profit, it did not cause a significant response from the market to the stock price. ERC measures how much the market responds to changes in stock prices to announced profit surprises. If profitability has no effect on the ERC, it indicates that the market does not consider changes in profitability levels to be important enough information to influence investment decisions or the company's stock price. This is in line with signalling theory, which states that companies use financial information such as earnings to signal to investors about future quality and prospects. However, in this case, even if the company has good profitability, the market may not see it as a strong enough positive signal. These results are supported by research (Dewi & Yadnyana, 2019), (Septiano et al., 2022), and (Aisyah, 2023) which state that profitability has no effect on ERC.

4.8.4 Effect of Firm Size Moderating Dividend Payout Ratio on Earning Response Coefficient

The test results show that firm size can moderate the dividend payout ratio to earnings response coefficient (ERC), which means that the size of the company affects the extent to which the dividend payout ratio affects the market response to the earnings announcement. The larger the size of the company, the stronger the influence of dividends on stock price changes after the earnings announcement. According to signalling theory, large companies are considered more stable and able to provide stronger signals to investors. Higher credibility makes the announcement of dividend payments from large companies considered a positive signal regarding its financial health. In contrast, small companies, despite paying the same dividends, may be considered more vulnerable, so the market is less confident in those signals. This result is supported by research (Pambudi et al., 2022), (Wahyudi & Kadir, 2020), and (Yanti, 2022) which states that firm size is able to moderate the dividend payout ratio to ERC.

4.8.5 Effect of Firm Size Moderating Leverage on Earning Response Coefficient

The test results show that firm size does not moderate leverage against earnings response coefficient (ERC), which means that company size does not affect how much leverage affects the market's response to announced profit information. Whether large or small, the size of the company does not affect stock price changes in response to profit surprises. According to signalling theory, although large companies are usually considered more stable and have more resources, which gives a positive signal regarding their debt management, the size of the company is not strong enough to change the way the market responds to earnings information. In this study, other factors such as debt management or market expectations for the company's performance are more influential than the size of the company itself. This result is supported by research (Putra, 2022), (Irawan, 2021), and (Tamara & Suaryana, 2020) which states that firm size is not able to moderate leverage against ERC.

4.8.6 The Effect of Firm Size Moderating Profitability on Earning Response Coefficient

The test results show that firm size does not moderate profitability against earnings response coefficient (ERC), which means that company size does not affect the relationship between profitability and market response to announced profit information. Whether a large or small company, the size of the company has no effect on how much the market responds to profit information based on profitability level. According to signalling theory,

although high profitability is usually considered a positive signal regarding a company's performance, the size of the company is not strong enough to moderate the impact of profitability on market reactions. The market may already have internalized expectations regarding a company's profitability, regardless of its size. These results are supported by research (Hernadianto & Yolanda, 2023), (Pangestu & Hariyanto, 2023), and (Panggabean et al., 2022) which state that firm size does not moderate profitability against ERCs.

5. CONCLUSIONS, SUGGESTIONS AND LIMITATIONS OF THE RESEARCH

5.1 *Research conclusions*

Based on the results of the discussion that has been described, it can be concluded that:

1. The dividend payout ratio affects the earnings response coefficient which means that the higher the dividend ratio paid by the company, the greater the market reaction to the profit reported by the company.
2. Leverage has no effect on earnings response coefficient which means that even if the company uses high debt, it does not cause a significant change in the share price or the market's response to the announced earnings information.
3. Profitability has no effect on earnings response coefficient means that even if a company generates a high profit, it does not generate a significant response from the market to the stock price.
4. Firm size moderates the dividend payout ratio to earnings response coefficient, which means that company size has a role in influencing how much the market responds to earnings announcements related to the dividend payout ratio. In other words, the larger the size of the company, the stronger the influence of the dividends distributed on the change in stock price after the earnings announcement.
5. Firm size does not moderate leverage on earnings response coefficient means that firm size does not play a role in strengthening or weakening the effect of leverage on market response to announced earnings information. Whether a company is large or small, the size of the company does not affect how much the stock price changes occur in response to unexpected earnings.
6. Firm size does not moderate profitability against earnings response means that firm size has no role in strengthening or weakening the relationship between profitability and market response to announced earnings. In this case, even if the company is large or small, it has no effect on how much the market responds to the announced profit information based on the company's profitability level.

5.2 *Research Advice*

1. Testing in Specific Industries or Sectors: The research can be expanded by focusing on specific sectors or industries to see if the results remain consistent. For example, sectors that have different characteristics in dividend or debt management, such as the technology or manufacturing sectors, may yield different results.
2. Follow-up Research with Other Variables: Based on the findings that leverage and profitability do not have a significant effect on earning response coefficient (ERC), it is recommended to conduct follow-up research involving other variables such as the company's ownership structure, corporate governance, or investment policy. These variables can provide deeper insights into the factors that influence the market's response to profit information.

5.3 *Research Limitations*

1. Limitations on the Variables Used: This study only focuses on a few key financial variables such as dividend payout ratio, leverage, profitability, and firm size. Therefore, the influence of other factors that may contribute to the market's response to earnings information, such as macroeconomic factors, market sentiment, and government policies, has not been analyzed.
2. Limited Sample: This study uses a sample of companies listed on a specific stock exchange in a specific period. Therefore, the results of this study may not be generalizable for companies outside the sample or for a longer period of time. This limitation needs to be acknowledged in the interpretation of the research results.

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