INKUBIS: Jurnal Ekonomi dan Bisnis
Volume 8, Number 2, 839-851
e_ISSN: 2775-3913
https://inkubis.polteksci.ac.id/index.php/ink/index
DOI: doi.org/10.59261/inkubis.v8i2.258

Determinants of profit response coefficients: proof of raw materials and chemical companies listed on the Indonesia Stock Exchange (2021–2023)

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Article Info:
Article history:
Accepted: April 23, 2026
Revised: June 12, 2026
Accepted: June 14, 2026

Keywords:
Accounting Conservatism; Growth Opportunities; Profit Persistence; Profit Response Coefficient; Risk of Default; Systemic Risk

Summary

Background: This study examines the determinants of the earnings response coefficient (ERC) in Indonesian commodity, chemical, and construction sectors.
Objective: To identify factors affecting the earnings response coefficient (ERC) in Indonesian listed companies during 2021–2023.
Methods: Purposive sampling was used to obtain 22 firms and a total of 66 observations that met the criteria. The following inclusion and exclusion criteria were applied: (1) companies continuously listed on the IDX in the subsectors of basic chemicals, agrochemicals, specialty chemicals, and building materials during 2021–2023; (2) companies issuing annual reports and financial statements that have been fully audited; (3) companies with stock price data available throughout the event window; (4) companies reporting net profit data for at least two consecutive years; (5) companies not suspended from trading during the observation period; and (6) companies with non-extreme or non-outlier data. Based on these criteria, 22 companies were selected, resulting in 66 observations across the financial years. The Common Effect Model (CEM) was selected based on the Chow, Hausman, and Lagrange Multiplier (LM) tests.
Results: Regression analysis showed that earnings persistence had a significant negative effect, while growth opportunities had a significant positive effect. Meanwhile, default risk, systematic risk, and accounting conservatism did not affect the earnings response coefficient.
Conclusion: Growth opportunities significantly increase the earnings response coefficient, while default risk, profit persistence, and accounting conservatism have no significant effect. These findings indicate that investors place greater emphasis on growth prospects than on risk-related indicators when responding to earnings information.

To cite this article: Viriany, V., Salim, M., & Imanuel, S. (2026). Determinants of profit response coefficients: Proof of raw materials and chemical companies listed on the Indonesia Stock Exchange (2021–2023). *INKUBIS: Jurnal Ekonomi dan Bisnis*, 8(2), 839–851. https://doi.org/10.59261/inkubis.v8i2.258

INTRODUCTION

The global capital market is increasingly aware of the importance of income quality in shaping investor behavior (Banyen, 2022; Gokhale & Mittal, 2024). According to the World Federation of Exchanges (2023), the global stock market capitalization exceeds USD 109 trillion, with emerging markets such as Indonesia contributing significantly to cross-border investment flows. In Indonesia, the IDX composite index (JCI) experienced a significant period of volatility in 2021–2023, driven by post-pandemic recovery dynamics, commodity price volatility, and monetary policy shifts. In this context, the raw materials sector (particularly basic chemicals, agrochemicals, specialty chemicals, and building materials) plays an important role in Indonesia's economy, contributing to domestic industrial activity and export performance. However, earnings

announcements in this sector show inconsistent market reactions, suggesting that investors weigh financial determinants differently than other sectors.

The earnings response coefficient (ERC) indicates the magnitude of the change in the stock price in response to unexpected profits and serves as an important measure of earnings information (Kim et al., 2018; Lindroos, 2020). Despite extensive research, previous research has yielded conflicting results on the impact of default risk, systemic risk, profit persistence, accounting conservatism, and growth opportunities on ERC. This inconsistency is the main research gap discussed in this study. The novelty of this study lies in its focus on certain sectors under the IDX-IC classification in the post-pandemic period, which have not been fully explored in the existing literature.

The study aims to contribute to signaling theory by showing how sector- and period-specific factors moderate investor responses to earnings information. Investors have their own judgment when deciding whether to invest in a company. One of the most used tools is financial statements, as they provide structured and relevant information about the company's financial situation and performance. Investors will analyze the financial statements to assess the company's future potential and improve its investment profit opportunities, including evaluating profitability, liquidity, and overall financial stability (Kothari et al., 2010; Lev & Gu, 2016).

Shares are financial instruments that reflect a company's ownership and represent a claim to the company's assets and profits. The value of a company can be reflected in its share price, which fluctuates based on market perception and available information. Higher stock prices mean that many investors believe that the company has great opportunities for strong future growth and performance. Conversely, a lower share price in a company can also be an indication that the company is experiencing financial and operational difficulties or is experiencing uncertainty in maintaining its performance (Baker et al., 2020).

Among the various indicators available, profit is often one of the most important metrics that investors use to evaluate a company's performance because it directly reflects the company's ability to generate returns. However, reported profits can be affected by profit management performed by managers, which can reduce their reliability and lead to information asymmetry between management and investors. Therefore, alternative measures such as the earnings response coefficient (ERC) are used to better understand how the market reacts to earnings information and to help predict equity returns (Chandra et al., 2021). Every company has inherent risks on itself, which is a factor that influences investment decisions, as the company may not be able to meet its financial obligations. These risks reflect the uncertainties investors face when allocating their resources and can affect their confidence in the company.

Investors assess management performance based on their responsibility to manage the resources entrusted to them (Rici et al., 2023; Roychowdhury & Watts, 2007). For investors, the risk of default is an important factor to consider before investing, as inability to pay debt will lead to significant losses for investors, such as loss of dividends and a decline in the value of the stock. In addition to the risk of default, companies also have systemic risks, risks arising from external factors such as inflation, changes in interest rates and factors that occur in the global market. Systemic risks cannot be eliminated through portfolio diversification, which makes investors more cautious when making investment decisions, especially during periods of high economic uncertainty.

Profit prediction is done to allow investors to effectively calculate the chances of their investment's return and assess whether they outweigh the risks associated with the investment. This process helps investors make more informed decisions by comparing expected returns with potential uncertainties. Profits can be affected by a variety of factors, requiring investors to use different methods of analysis to arrive at more accurate estimates. When a company has stable profits over time, it indicates that current profits can be used to predict future profits. Unrealized profits can mislead users of financial statements; Therefore, low profit quality can steer investors in the wrong direction. The quality of profits plays an important role in predicting future profits, so effective management is needed to strategize the company's long-term plan and maintain consistency in performance. For investors, earnings are considered information about a company's stock price, as earnings reports can trigger reactions (Dechow et al., 2010).

Accounting conservatism is a management approach to treating existing opportunities by acknowledging all costs but not all revenue. This approach is intended to reduce the risk of

exaggerating financial performance and provide a more cautious view of the state of the business. Investors need to be more careful when making investment decisions as they need to conduct an in-depth analysis of cost and income accounting in the financial statements presented by the company. Investors often use business opportunity indicators to predict future revenue growth; Therefore, growth opportunities often affect market expectations and investor reactions. In the capital market, equity investment is always associated with uncertainty, so profit information alone is not enough for investors when investing (Ma & Jeong, 2022).

Signaling theory is a concept in which a company's management signals investors based on their vision of the company's prospects. This is important because investors rely on available information to reduce uncertainty when making investment decisions. If management believes that the company has good prospects, such as expecting revenue to increase in the future, they will send a positive signal to investors. Investors will then react based on management signals. When the signal is positive, investors are more likely to buy the company's shares, which can lead to an increase in the stock price. This theory arose because management and investors have access to a wide range of information. Since management is directly involved in running a company, they must provide signals to investors about the company's performance and prospects (Rusli et al., 2023).

The risk of default arises from the costs that a company must bear for the use of its assets, especially when the costs are high relative to the assets owned. This condition reflects the company's financial burden and its ability to manage its liabilities effectively. The higher these costs, the greater the risk inherent in the company, which in turn can result in higher expected returns for investors. However, despite the potential for higher returns, investors generally avoid risk and avoid companies with high levels of risk, preferring companies that offer more stable returns with less uncertainty. One of the main indicators of this risk is the level of debt that the company has. Higher debt levels indicate greater financial leverage, which increases the company's obligation to meet fixed payments, regardless of its financial performance.

Investors may see high-leverage companies as a negative signal, as the profits generated through debt financing are often prioritized for debt payments rather than distributed to shareholders. Additionally, high debt levels lead to higher interest costs, which can reduce overall profitability and ultimately reduce potential returns for investors (Baker et al., 2020). This situation can also weaken investor confidence, as companies are seen as more likely to face financial problems. From the discussion set out above, the following hypotheses can be proposed:
H1: The risk of default negatively impacts the Revenue Response Coefficient.

Systematic risk is the risk arising from the activity that occurs in the market. Market situations and circumstances such as government policies or pandemics, which are unpredictable and beyond the company's control, are considered systemic risks. This type of risk affects all companies in the market and cannot be prevented by diversification. As a result, even well-performing companies can still be affected by poor market conditions. The more volatile and uncertain the market, the higher the risk the company faces. The higher the systematic risk, the greater the uncertainty about the company's long-term survival and ability to generate distributed profits to investors.

This uncertainty can reduce investor confidence and make them more cautious when allocating their funds. Extremely high systemic risks can cause some companies to suffer losses or even go bankrupt if they are unable to adapt and react quickly to market conditions. This will lead to significant losses for investors as there are no profits to share, and the company's poor outlook will cause the stock price to fall. According to signaling theory, high systemic risk means a lower chance that investors will achieve the expected returns, as the company's chances of survival become smaller (Yuliandhari & Fadila, 2024). In such circumstances, investors can move their investments to safer assets to minimize potential losses. Given the points mentioned above, the following hypothesis is:
H2: Systematic risk has a negative effect on the Revenue Response Coefficient.

Revenue persistence is the ability to use current revenue to predict future revenue, and persistent revenue will create expectations for future revenue generated (Nasution et al., 2022). Sustained year-on-year profit is an indication of skillful management in controlling a company's costs relative to revenue and managing the company's ability to generate high sales leading to high profits. Highly skilled management gains the trust of investors to manage the funds they have

invested in the company. In addition, stable profits reflect consistency in the company's operational performance over time.

Investors will be more confident in investing in companies with sustainable profits, as this provides more certainty that they will achieve the expected returns. Profit persistence is also an indicator of future profits. If operating profit consistently increases from year to year, it is likely that the company will continue to generate profits in the future, making returns more predictable for investors. This situation also reduces the information uncertainty that investors face when making investment decisions. Sustained profits send a positive signal to investors because they reduce the risk of investors not receiving the expected returns. Reflecting on the points discussed above, the hypothesis we propose is as follows:

H3: Profit persistence has a positive effect on the Revenue Response Coefficient.

Accounting conservatism is an approach in which profits and assets are expected to be small, while costs and liabilities are expected to be high, so that companies anticipate potential losses (Darmawan et al., 2024). This approach emphasizes prudence in financial reporting to avoid exaggerating financial performance. The application of accounting conservatism describes a worst-case scenario in which all costs are recognized and the profits generated are relatively small; Therefore, financial statements are presented in a more cautious or pessimistic manner. When a company practices accounting conservatism, it does not consider all possible profits, creating the possibility that future profits will be higher than those under conservative accounting.

This difference can provide investors with additional assurance about the reliability of reported earnings. Investors tend to be more confident to invest in companies that make a profit, even when adopting conservative accounting principles, as this suggests that the company can still perform well under less favorable conditions. For investors, this is a positive sign, as they will receive at least the expected returns based on conservative forecasts, or perhaps even higher returns. The application of accountant conservatism also creates a sense of trust among investors, as companies tend not to exaggerate profits just to attract investment. This makes financial information more credible and useful for decision-making. The above discussion shows the following hypothesis:

H4: Accounting conservatism has a positive effect on the profit response coefficient.

Growth opportunities are the potential for a company to further develop and expand its operational scope, increase value and achieve higher profits in the future. This potential reflects the company's ability to expand its market share and improve its long-term performance. Companies with high growth opportunities have a great chance of growing into larger companies if their management is skilled. As the company grows, the company can also diversify its business operations and reduce its reliance on a single source of revenue. The larger the company, the more sources of income it can generate. In addition, larger companies have a higher bargaining position against suppliers and benefit from economies of scale that allow them to save on cost per unit. Higher revenues and lower costs will result in greater profits for the company; This sends a positive signal to investors because the higher the profit, the higher the return shared with the investor. This positive signal can increase investor interest and attract more capital to the company. In addition, the company's share price will rise as it grows, increasing investment opportunities for investors. Considering the above discussion, the hypotheses to consider are:

H5: Growth opportunities have a positive effect on the Revenue Response Coefficient.

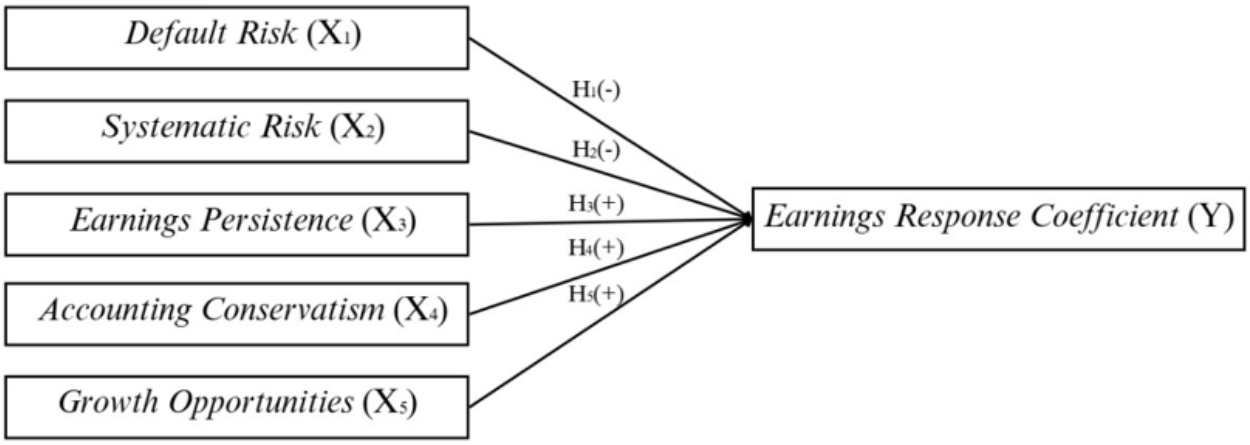

Figure 1. Research model framework

METHODS

This study used the population of companies in the raw materials sector, consisting of basic chemicals, agrochemicals, specialty chemicals, and building materials, listed on the Indonesia Stock Exchange (IDX) for the 2021–2023 period based on the Indonesia Stock Exchange Industrial Classification (IDX-IC). The data used in this study were secondary data obtained from financial and annual reports. Purposive sampling was employed to obtain 22 firms, resulting in a total of 66 observations that met the predetermined criteria.

Three regression models were considered, namely the Common Effect Model (CEM), the Fixed Effect Model (FEM), and the Random Effect Model (REM). To determine the most appropriate model, the Chow test was conducted to compare the Common Effect Model and the Fixed Effect Model, followed by the Hausman test to compare the Fixed Effect Model and the Random Effect Model. Based on the Chow test results (Prob > F = 0.239), the Common Effect Model (CEM) was preferred over the Fixed Effect Model. The subsequent Hausman test (Prob > chi^2 = 0.790) indicated the Random Effect Model; however, the Lagrange Multiplier (LM) test (Prob > $chibar^2$ = 0.465) further supported the selection of the Common Effect Model. Therefore, the Common Effect Model (CEM) was used to test the final hypotheses. This selection was justified by the assumed homogeneity of firm behavior within the same industry subsector during the observation period. The regression equation used in this study was as follows:

$$ERCi,t = \alpha + \beta1(Lev)i,t + \beta2(SR)i,t + \beta3(EP)i,t + \beta4(AC)i,t + \beta5(OP)i,t + \mu\ i,t$$

ERC = Profit response coefficient
Lev = Risk of default
SR = Systemic risk
EP = Profit perseverance
AC = The Conservatism of Accounting GO = Growth opportunities
μ = Error

Measurement

Table 1. Measurement of each variable

Var	Formula	Source
Dependent variable		
ERC	CARit = α + βUEit + e Description: CAR = cumulative abnormal return EU = unexpected income α = constant	(Rici et al., 2023)

	β = profit response coefficient e = error	
THE END	$UE = \frac{EPS_t - EPS_{t-1}}{EPS_{t-1}}$	
CARS	$CAR = \sum_{t=-3}^{t=+3} AR_{it}$	
$\boldsymbol{AR_{it}}$	$AR_{it} = R_{it} - R_{mt}$ Description: AR_{it} = abnormal returns on the farm R_{it} = return of equity R_{mt} = market returns	
Return on equity	$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}}$ Description: R_{it} = return of equity P_{it} = the closing price of the stock at t (day) P_{it-1} = stock closing price at T-1 (day)	
Market Returns	$R_{mt} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}}$ Description: R_{mt} = market returns $IHSG_t$ = composite cover at t (day) $IHSG_{t-1}$ = composite cover at T-1 (day)	
Independent variables		
Risk of default	$\text{Leverage} = \frac{\text{Total Debt}}{\text{Equity}}$	(Rici et al., 2023)
Systemic risk	$R_{it} = \alpha + \beta R_{mt} + e$ Description: R_{it} = return of equity R_{mt} = market returns α = constant β = systematic risk e = error	(Rici et al., 2023)
Profit perseverance	$X_{it} = \alpha + \beta X_{it-1} + e$ Description: X_{it} = Company profit i in year t X_{it-1} = Company profit i in year t-1 α = constant β = Profit Persistence e = error	(Darmawan et al., 2024)
Accounting conservatism	$AC = \frac{NI + \text{Dep} - CFO_{x-1}}{\text{Total Asset}}$	(Embuningtyas et al., 2022)
Growth opportunities	$\text{PER} = \frac{\text{Stock Price}}{\text{EPS}}$	(Nasution et al., 2022)

RESULTS AND DISCUSSION

Results

Descriptive statistical tests were used to determine the mean, standard deviation, maximum, minimum, and skewness of the data distribution for each variable in this study, namely ERC, LEV, SR, EP, AC, and GO. The results of the descriptive statistical test can be seen in Table 2.

Table 2. Descriptive statistics

	N	Medium	Medicine	Max	Minutes	Std. Dev.
ERC	66	-2.659	-2.479	3.515	-9.107	2.166
Lev	66	0.393	0.356	1.019	0.318	0.170
SR	66	2.716	2.020	9.946	0.503	1.987
EP	66	1.463	1.034	12.969	0.959	1.966
AC	66	0.204	0.190	0.735	0.021	0.113
GO	66	304.949	5.498	4733.663	1.191	939.797

Based on the descriptive statistics in Table 2, this study uses 66 business samples from the 2021-2023 period. The profit response coefficient variable showed a maximum value of 3.515 and a minimum value of -9.107 with a median value of -2.479, an average value of -2.659 and a standard deviation of 2.166. The default risk variable showed a maximum value of 1.019 and a minimum value of 0.318 with a median value of 0.356, a mean value of 0.393 and a standard deviation of 0.170. The systematic risk variables showed a maximum value of 9.946 and a minimum value of 0.503 with a median value of 2.020, a mean value of 2.716 and a standard deviation of 1.987.

The variables for profit persistence show a maximum value of 12.969 and a minimum value of 0.959 with a median value of 1.034, an average value of 1.463 and a standard deviation of 1.966. Conservatism of variable accounting shows a maximum value of 0.735 and a minimum value of 0.021 with a median value of 0.190, an average value of 0.204, and a standard deviation of 0.113. The variable growth probability shows a maximum value of 4733,663 and a minimum value of 1,191 with a median value of 5,498, an average value of 304,949 and a standard deviation of 939,797.

Table 3. Panel Specification Summary

Tests	Value	Results
Chow Tests	Maybe > F = 0.239	General models
Hausman Test	Maybe > chi2 = 0.790	Random model
LM Tests	Maybe > chibar 2 = 0.465	General models

Table 4. Hypothetical results with CEM

	Coefficients	p-value
C	-1.757	0.026
Lev	-0.304	0.819
SR	0.065	0.578
EP	-0.546	0.000
AC	-1.781	0.372
GO	0.001	0.008
R2	0.336	
Prob-F Statistics	0.000	
N	66	

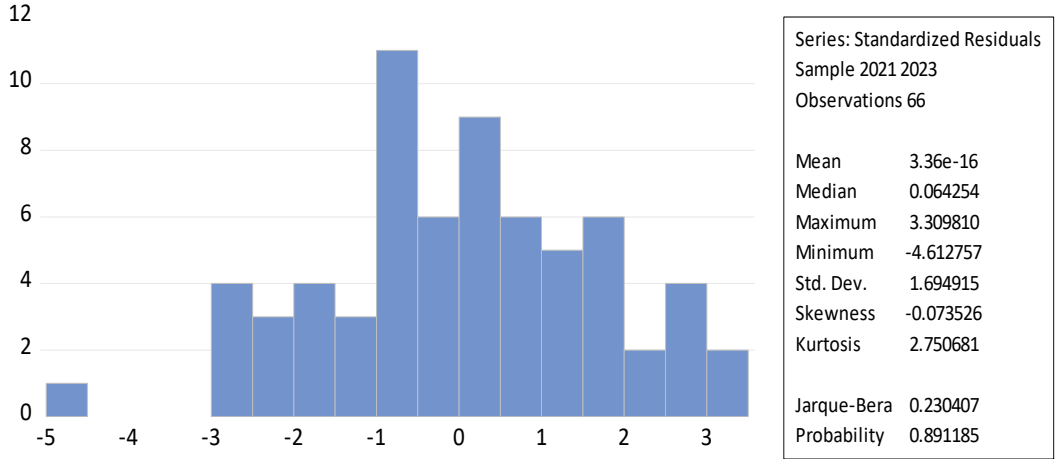

Figure 2. Normality test

Table 5. Multicollinearity test

	LEV	SR	EP	AC	GO
LEV	1.000000	-0.164795	0.141439	-0.014847	-0.032086
SR	-0.164795	1.000000	0.030171	0.131165	0.223093
EP	0.141439	0.030171	1.000000	0.013378	-0.090652
AC	-0.014847	0.131165	0.013378	1.000000	-0.152458
GO	-0.032086	0.223093	-0.090652	-0.152458	1.000000

Table 6. Autocorrelation test

The Roots of MSEs	1.682025	R-squared	0.387430
Var dependen average	-2.659150	Custom R-square	0.336383
Elementary School depends on var	2.165559	Southeastern regression	1.764123
Akaike info criteria	4.059693	Som Squared Resid	186.7278
Schwarz Criteria	4.258752	Log-possibilities	-127.9699
Hannan-Quinn criteria.	4.138350	F-statistics	7.589603
Durbin-Watson Statistics	2.025753	Prob(F-statistic)	0.000014

Table 7. Heteroscedasticity test

Heteroskedasticity test: Breusch-Pagan-Godfrey			
Hypothesis zero: Homoskedasticity			
F-statistics	1.752126	May F (5.60)	0.1366
Obs* R-square	8.408904	Maybe Chi-Square (5)	0.1351
Scale explains SS	6.083185	Maybe Chi-Square (5)	0.2982

Based on the results of the coefficient test in Table 4, the adjusted R-squared value is 0.336. This shows that approximately 33.6% of the variation in the Earnings Response Coefficient (ERC) can be explained by the independent variables used in the model, namely default risk, systematic risk, earnings persistence, accounting conservatism, and growth probability. Meanwhile, the remaining 66.4% is influenced by other variables not included in the regression model, suggesting that additional external factors may also play an important role in determining ERC. In addition, the F-test results show a probability value of 0.000, which is below the significance level of 0.05. This implies that all independent variables (default risk, systematic risk, earnings persistence, accounting conservatism, and growth probability) jointly have a significant effect on the Earnings Response Coefficient. In other words, the regression model used in this study is considered appropriate and can explain the relationship between the independent and dependent variables simultaneously.

Based on the results of the partial test in Table 2, each independent variable shows a different effect on the Earnings Response Coefficient. The coefficient of default risk (proxied by

leverage) is −0.303 with a significance value of 0.819, indicating that default risk has a negative but statistically insignificant effect on the Earnings Response Coefficient. This suggests that variations in leverage do not materially affect investors' reactions to earnings information. Systematic risk has a coefficient of 0.065 with a significance value of 0.578, indicating a positive but insignificant effect on the Earnings Response Coefficient. These findings imply that market-wide risk does not significantly change the way investors respond to earnings announcements. In contrast, earnings persistence has a coefficient of −0.546 with a significance value of 0.000, indicating a significant negative effect on the Earnings Response Coefficient.

This means that higher earnings persistence is associated with lower market reactions to earnings information, likely because stable earnings are more predictable and contain less new information for investors. Accounting conservatism has a coefficient of −1.781 with a significance value of 0.372, indicating a negative but insignificant effect on the Earnings Response Coefficient. This suggests that the application of conservative accounting practices does not significantly affect investors' responses to reported earnings. Growth probability has a coefficient of 0.001 with a significance value of 0.008, indicating a positive and statistically significant effect on the Earnings Response Coefficient. This implies that firms with higher growth potential tend to generate stronger investor reactions to earnings reports, as they are perceived to have better future return prospects.

The normality test in this study was carried out using a sample of 66 companies from the basic chemicals, agricultural chemicals, specialty chemicals, and building materials subsectors listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. Data processing and analysis were conducted using EViews version 12. The purpose of the normality test is to determine whether the residuals in the regression model are normally distributed, since normality is one of the key assumptions required to ensure the validity of statistical inference in regression analysis. The normality of the data was assessed using the Jarque–Bera test, which evaluates whether the skewness and kurtosis of the residuals correspond to a normal distribution. Based on the test results, the Jarque–Bera value is 0.230407, with a probability value of 0.891185. Since this probability value is significantly higher than the commonly used significance level of 0.05, the null hypothesis that the data are normally distributed cannot be rejected.

Based on the results in Table 5, the correlation matrix shows the relationships among all independent variables, considering the magnitude of correlation regardless of direction for interpretation purposes. The correlation value between default risk and systematic risk is 0.164795, while the correlation between default risk and earnings persistence is 0.141439. In addition, the correlation between default risk and accounting conservatism is 0.014847, and between default risk and growth opportunity is 0.032086. Furthermore, the correlation between systematic risk and earnings persistence is 0.030171, while the correlation between systematic risk and accounting conservatism is 0.131165, and between systematic risk and growth opportunity is 0.223093.

The correlation between earnings persistence and accounting conservatism is 0.013378, and between earnings persistence and growth opportunity is 0.090652. Finally, the correlation between accounting conservatism and growth opportunity is 0.152458. All correlation values are relatively low and fall well below the commonly accepted threshold of 0.85. This indicates that there is no strong linear relationship among the independent variables included in the regression model. Therefore, it can be concluded that the model does not suffer from multicollinearity problems.

In this study, there were five independent variables (k = 5) with a total sample size of 66 observations (n = 66). The autocorrelation test was conducted using the Durbin–Watson (DW) test at a 5% significance level to determine whether there is correlation among residuals in the regression model. Based on the Durbin–Watson table, the upper bound value (dU) is 1.7675, while 4 − dU is 2.2325. The Durbin–Watson statistic obtained from the regression results is 2.025753. Since this value falls within the range dU < DW < 4 − dU (1.7675 < 2.025753 < 2.2325), it can be concluded that there is no autocorrelation in the regression model. These results indicate that the residuals are independent across observations, meaning there is no systematic error pattern. The absence of autocorrelation suggests that the regression model satisfies one of the key classical assumptions, making the coefficient estimates efficient and reliable. Therefore, the model is appropriate for further analysis and hypothesis testing without concerns regarding

autocorrelation.

Based on the results in Table 7, the value of Prob. Chi-square (5) is 0.1351. Since this value is higher than the 0.05 significance level, there is no evidence of heteroscedasticity in the variables used in this study. In other words, the residual variance is constant across observations, satisfying the homoscedasticity assumption in the regression model. These results indicate that the model does not exhibit heteroscedasticity problems, meaning that the error terms are evenly distributed and do not follow a systematic pattern. As a result, the estimates generated by the regression model are considered reliable and unbiased. Therefore, it can be concluded that the data in this study meet the heteroscedasticity assumption, and the model is suitable for further analysis using multiple linear regression.

Discussion

The results in Table 4 show that the risk of default does not have a statistically significant effect on the Earnings Response Coefficient (ERC). These findings are in line with the research of Raza (2021), who also concluded that default risk does not significantly affect the Earnings Response Coefficient. This suggests that markets do not always consider default risk as a primary factor when reacting to earnings information. In the context of signaling theory, these findings can be explained by the fact that in Indonesia's chemical and construction sectors, leverage levels were generally moderate and stable during 2021–2023, meaning that debt-related information did not function as a strong new signal for the market. One possible explanation for this phenomenon is that firms with higher default risk tend to have greater access to capital or are more willing to use external financing to expand their operations.

These expansions can take many forms, such as increasing marketing expenditures to enhance brand visibility and drive revenue growth, investing in advanced technologies to improve product quality and operational efficiency, or exploring new market opportunities. As a result, these strategic initiatives may support firm growth and increase the potential to generate higher future profits, which in turn can attract investors despite the associated risks. In addition, the concept of risk and return plays an important role in investor decision-making. According to financial theory, higher risk is generally associated with higher potential returns. Therefore, not all investors avoid firms with high default risk. Conversely, some investors, especially those with higher risk tolerance, may be attracted to such firms because they offer greater potential returns than more stable, low-risk investments. For these investors, small and stable returns may be less attractive because their primary goal is to maximize return on investment.

The results in Table 4 show that systematic risk does not have a significant influence on the Earnings Response Coefficient (ERC). These findings are consistent with research conducted by Rici (2023), which also concluded that systematic risk has no significant effect on the Earnings Response Coefficient. This implies that market-wide risks do not materially change how investors respond to earnings reports. From the perspective of signaling theory, because systematic risk is distributed across all firms in the market, it does not serve as a distinguishing signal between companies. Investors in Indonesia's capital markets during the post-COVID recovery period have taken macroeconomic uncertainty into account, which may have weakened their responses to systematic risk in earnings announcements (Yuliandhari & Fadila, 2024). This is consistent with the efficient market hypothesis, which suggests that publicly available risk information is already reflected in stock prices. Systematic risk, which reflects general uncertainty in the market due to macroeconomic factors such as interest rates, inflation, and economic cycles, is inherently unavoidable and affects all businesses to some degree.

Since this type of risk cannot be eliminated through diversification, investors generally recognize it as a normal component of investing. Therefore, instead of avoiding risk entirely, investors typically incorporate it into their overall investment strategy and required rate of return. From an investment perspective, higher systematic risk is often associated with higher expected returns, in line with the fundamental risk–return trade-off. Therefore, many investors are not discouraged by high levels of systematic risk if expected returns are sufficient to compensate for the risk. Rather than seeking perfectly stable market conditions, which are rarely achievable, investors are more likely to identify firms that demonstrate resilience and the ability to perform well even in volatile and unpredictable economic conditions.

The results in Table 4 show that earnings persistence has a negative and statistically

significant effect on the Earnings Response Coefficient (ERC). These results do not support H3, which predicts a positive relationship between earnings persistence and ERC.

These findings are consistent with Sandy (2025), which also found that persistent earnings negatively affect the Earnings Response Coefficient; however, the difference lies more in interpretation and context rather than in the direction of the relationship itself. In this study, the negative effect indicates that higher earnings persistence is associated with a lower market reaction to earnings information. Firms with highly persistent earnings generally exhibit stable and consistent performance over time. This condition is often associated with mature firms that are perceived as having lower growth volatility and more predictable earnings streams, which may reduce the incremental information content of earnings announcements for investors.

The results in Table 4 show that accounting conservatism has no significant effect on the Earnings Response Coefficient (ERC). These findings are consistent with research conducted by Paramita (2020), which also concluded that accounting conservatism does not significantly affect the Earnings Response Coefficient. This suggests that the level of conservatism applied in financial reporting does not materially change how investors react to earnings information released by firms. Accounting conservatism refers to a prudent reporting approach in which firms recognize expenses and potential losses earlier, while delaying the recognition of income and gains until they are more certain. As a result, financial statements prepared under conservative accounting principles often report lower income and asset values compared to more neutral accounting approaches.

While this method is intended to reduce the risk of overstating financial performance, it may also lead to an understatement of the firm's actual economic condition. From an investor's perspective, this conservative reporting approach can reduce the perceived informativeness of reported earnings, especially for those who rely heavily on net income as a basis for investment decisions. Investors seeking higher returns may find conservative financial statements less informative because they do not fully reflect a firm's profitability potential. Understated revenue and assets may create the impression that a firm is underperforming, even when its underlying economic performance is stronger.

The results in Table 4 show that growth opportunities have a positive and statistically significant effect on the Earnings Response Coefficient (ERC). These findings are consistent with research conducted by Handi (2022), which also concluded that growth opportunities positively influence the Earnings Response Coefficient. This suggests that the market reacts more strongly to earnings information released by firms with strong growth prospects. Investors are generally more interested in firms with significant growth potential because they are expected to expand operations, increase market share, and generate higher future cash flows. As firms grow, the scale of their operations increases, allowing them to strengthen revenue streams and enhance their competitive position in the market.

This growth potential serves as an important signal to investors that the firm can deliver stronger financial performance in the future. Additionally, firms with strong growth opportunities often benefit from economies of scale, which enable them to reduce average costs as production increases. This cost efficiency can lead to higher profitability, primarily reflected in improved net profit margins. Higher net margins are an attractive indicator for investors, as they suggest that the firm is not only generating higher revenues but also managing costs effectively, thereby increasing the portion of income available for shareholders or reinvestment.

CONCLUSION

This study examines the determinants of the earnings response coefficient (ERC) among raw material and chemical companies listed on the Indonesia Stock Exchange (IDX) during 2021–2023. The findings are as follows. First, default risk (H1) has no significant effect on the ERC, suggesting that leverage is not a determining factor in investors' reactions to earnings announcements in this sector. This implies that companies with stable and predictable earnings do not necessarily experience stronger market reactions, as investors tend to prioritize firms with higher growth and return potential rather than stability alone. In addition, accounting conservatism does not have a significant effect on the ERC, which may be explained by investors' tendency to view conservatively reported financial statements as less reflective of a firm's underlying economic performance, thereby reducing their reliance on such information.

On the other hand, growth opportunities have a positive and significant effect on the earnings response coefficient, indicating that firms with stronger growth prospects tend to elicit stronger investor reactions due to expectations of higher future returns. Based on these findings, management should focus on strategies that emphasize growth and expansion rather than maintaining a stagnant position. This can be achieved through initiatives such as launching new products, expanding into new markets, or pursuing mergers and acquisitions to enhance firm scale and competitiveness. Firms with strong growth potential are more likely to attract investor interest and generate positive market responses. In addition, management should strive to increase earnings consistently over time, as sustained profitability signals greater investment opportunities and further strengthens investor confidence.

This research makes several contributions. Theoretically, it extends signaling theory by demonstrating that capital markets respond more strongly to growth signals than to risk-based signals within an industry-specific context. Methodologically, it employs a panel data approach using a Generalized Effects Model, validated through standard model selection procedures such as the Chow, Hausman, and Lagrange Multiplier tests in a post-pandemic setting. In practice, investors are advised to prioritize growth-oriented indicators over risk proxies when valuing companies in the chemical and building materials sectors. Regulators and corporate management may also consider improving the quality and timeliness of financial reporting to enhance market efficiency. Future research may explore the moderating role of ESG disclosure, audit quality, information asymmetry, or behavioral finance factors on the ERC across broader industrial sectors.

ACKNOWLEDGEMENT

The authors would like to express their sincere gratitude to Universitas Tarumanagara for providing institutional support and research facilities throughout this study. The authors also thank the Indonesia Stock Exchange (IDX) for making financial data publicly accessible, which enabled the collection of secondary data used in this research. Special appreciation is extended to the reviewers and editors of INKUBIS: Jurnal Ekonomi dan Bisnis for their constructive feedback and valuable suggestions that significantly improved the quality of this manuscript.

AUTHOR CONTRIBUTION STATEMENT

Viriany: Conceptualization, Methodology, Formal Analysis, Writing – Original Draft. Monica Salim: Data Curation, Investigation, Writing – Review & Editing. Steven Imanuel: Visualization, Validation, Writing – Review & Editing. All authors have read and agreed to the published version of the manuscript.

REFERENCES

Baker, S. R., Bloom, N., Davis, S. J., & Terry, S. J. (2020). *Covid-induced economic uncertainty*. National Bureau of Economic Research. https://doi.org/10.3386/w26983

Banyen, T. (2022). Behavioral drivers of stock market participation: Insights from Ghanaian investors. Journal of Business and Economic Options, 5(2), 1-13.

Chandra, Y., Susanti, M., & Salikim, S. (2021). *Pengaruh Persistensi Laba, Dan Risiko Sistematik Terhadap Earnings Response Coefficient (Erc) Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Pada Tahun 2016-2018*. https://doi.org/10.31253/aktek.v13i1.676

Darmawan, A., Aryati, T., & Ustadi, M. N. (2024). The Influence of Prudence and Earnings Persistence on Earnings Response Coefficient With Financial Flexibility as a Moderating Variable. *International Journal of Contemporary Accounting*, *6*(2), 127–144.

Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, *50*(2–3), 344–401. https://doi.org/10.1016/j.jacceco.2010.09.001

Embuningtyas, S. S., Anggraeni, R., & Puspasari, O. R. (2022). Accounting conservatism, Islamic social reporting, and earning responses coefficient: An empirical analysis. *JIFA (Journal of Islamic Finance and Accounting)*, *5*(2), 98–108. https://doi.org/10.22515/jifa.v5i2.5651

Gokhale, G. M., & Mittal, A. (2024). Exploring the nexus of capital market and investor behaviour: A systematic literature review. International Journal of Economics and Financial Issues, 14(2), 65.

Handi, H., Rahmatika, D. N., & Fanani, B. (2022). Understanding earnings response coefficient from growth opportunities, earnings persistance, and intellectual capital; empirical study from idx-30 indexed companies. *2nd International Conference on Social Science, Humanities, Education and Society Development (ICONS 2021)*, 127–134.

Kim, Y. C., Seol, I., & Kang, Y. S. (2018). A study on the earnings response coefficient (ERC) of socially responsible firms: Legal environment and stages of corporate social responsibility. Management Research Review, 41(9), 1010-1032.

Kothari, S. P., Ramanna, K., & Skinner, D. J. (2010). Implications for GAAP from an analysis of positive research in accounting. *Journal of Accounting and Economics*, *50*(2–3), 246–286. https://doi.org/10.1016/j.jacceco.2021.101381

Lev, B., & Gu, F. (2016). *The end of accounting and the path forward for investors and managers*. John Wiley & Sons.

Lindroos, B. (2020). The Value Relevance of Annual Reports: An Empirical Study of the Earnings Response Coefficient and Cumulative Abnormal Returns of Finnish Firms.

Ma, H., & Jeong, K. (2022). The effects of accounting conservatism on investment decision: Evidence from listed companies in China. *Cogent Business & Management*, *9*(1), 2093484. https://doi.org/10.1080/23311975.2022.2093484

Nasution, S. H. Z., Maksum, A., & Gultom, P. (2022). *Factors Affecting Earning Response Coefficient with Profitability as a Moderating Variable in Mining Companies Listed on The Indonesia Stock Exchange for the 2018-2020 Period*.

Paramita, R. W. D., Fadah, I., Tobing, D. S. K., & Suroso, I. (2020). Accounting earnings response coefficient: Is the earning response coefficient better or not. *The Journal of Asian Finance, Economics and Business*, *7*(10), 51–61. https://doi.org/10.13106/jafeb.2020.vol7.no10.051

Raza, W., Hayat, K., Zahir, S., & Muhammad, N. (2021). Moderating role of board size and its effect on default risk and earning response coefficient (ERC). *Multicultural Education*, *7*(7).

Rici, S. A., Wahyudi, R., Viona, R., & Crefioza, O. (2023). Risiko Sistematis dan Leverage terhadap Earnings Response Coefficient Dimoderasi oleh Corporate Social Responsibility. *Jurnal Ekobistek*, *12*(4), 752–758. https://doi.org/10.35134/ekobistek.v12i4.711

Roychowdhury, S., & Watts, R. L. (2007). Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting. *Journal of Accounting and Economics*, *44*(1–2), 2–31. https://doi.org/10.1016/j.jacceco.2006.12.003

Sandy, R. M., & Mulya, A. S. (2025). Earnings Response Coefficient: Earnings persistence moderated by capital structure and economic growth. *Cogent Business & Management*, *12*(1), 2441475. https://doi.org/10.1080/23311975.2024.2441475

Yuliandhari, W. S., & Fadila, E. N. (2024). The Influence of Corporate Social Responsibility Disclosure, Accounting Conservatism, Earnings Persistence, and Systematic Risk on Earnings Response Coefficient (ERC). *Atestasi: Jurnal Ilmiah Akuntansi*, *7*(2), 1000–1017. https://doi.org/10.57178/atestasi.v7i2.883