

The Effect of Earnings Persistence and Capital Structure on Earnings Response Coefficient in Indonesia Stock Exchange



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ABSTRACT: This study managed to investigate the effect of earnings persistence and leverage on the Earnings Response Coefficient (ERC) in companies listed on the Indonesia Stock Exchange. Based on the annual report data of 265 companies from 2011 to 2021, we show that earnings persistence has a significant and positive impact on ERC, while leverage has a limited impact on ERC. Further findings demonstrate that higher investor sentiment could lead to a larger impact of earnings persistence on ERC. These results imply that, as high earning quality Attracts high investor sentiment in the trading stock, great news can be processed into the price quickly and the price rises in a short period, while bad news could also lead to immediate price corrections with investors' attention. Thus, we find that a positive relationship between ROE and ERC, and investor sentiment helps strengthen the relationship. Our study adds the studies on price resilience and expands the understanding of the Indonesia Stock Exchange's features.

KEYWORDS: Earnings Response Coefficient; Indonesia Stock Exchange; Financial Report; Bank Indonesia; Earnings; Capital Structure

INTRODUCTION

Earning response coefficient (ERC), a measure of stock return based on market reaction to reported profit figures from corporations is affected by several factors, including the quality of such profits, which is evaluated based on the elements that comprise the structure of costs and corporate earnings as well as elements of the financial position of the pertinent issues related to the quality of reported earnings. The magnitude of the regression coefficients, out-of-the-ordinary stock returns, and unexpected earnings will all be reflected in the ERC. ERC is a coefficient that aims to measure the strength of report information to affect the level of return on investment expected by investors in attracting reported company profits (Wijaya, et al, 2020). However, it turns out that every increase in stock prices is not always followed by a positive income. On the contrary, when profits fall, stock prices do not always decrease. This indicates that in making economic decisions investors do need information about the company's financial condition, also other information is needed.

Ball and Brown's research (1968) found that there was a significant relationship between company earnings announcements and changes in stock prices. For instance, if announced earnings increased, there was a trend of positive changes in stock prices, and vice versa if the announcement of profits decreased there will be negative changes in stock prices. To measure investor reaction or stock price response to accounting profit information, ERC is used. Based on Cho and Jung (1991), ERC is defined as the effect of each dollar of unexpected earnings on stock returns and is usually measured by the coefficients in the regression of abnormal stock returns and unexpected earnings.

This coefficient measures the response of stock prices or equity market values to the information contained in accounting earnings. The low ERC indicates that earnings are less informative for investors to make an economic decision. Every event that occurs in the capital market will cause a reaction from market participants, one of which is the announcement of earnings, the market will react which can be seen from the movement of shares (Riyani, et al. 2023). The company aims to maximize the welfare of shareholders through investment decisions or policies, funding decisions, and dividend decisions which are reflected in stock prices in the capital market, so from the point of view of financial management. This goal is often translated as an effort to maximize the value of the company (Khan. Z.A and Hussanie, I. 2018).

There is some differentiation from this research. First, in this study, the author used financial variables that might influence

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ERC in the form of earnings persistence and leverage. Second, the case studies in this research are all companies listed on the stock exchange in Indonesia. Third, the length of time studied is relatively longer, namely during the period of 11 years from 2011 to 2021. 2011 was used as the basis year for the research because in that year the existence of a crisis phenomenon in the European Union caused by Greece's state debt and then spread to Ireland, Portugal, Spain, and Italy as well as the economic slowdown in Asia. This situation is likely to cause a shock to the capital market in Indonesia. Another reason for research from 2011 to 2021 is to avoid data obsolescence because the data obtained is the most recent. Four, this research method uses a panel linear model so that the research results obtained are more updated and more accurate. Therefore, this paper will discuss more the factors that influence ERC and hope that the results of this study will have a different response from previous studies. In this study, the researchers tried to find out how much "The Effect of Earnings Persistence and Leverage on Earnings Response Coefficient".

Research Aim

This study aims to analyze the effect of earnings persistence and capital structure on the earnings response coefficient (ERC) in companies listed on the Indonesia stock exchange (IDX). The problem can be determined as follows:

1. How does earnings persistence affect the Earnings Response Coefficient (ERC)?
2. How does capital structure affect the Earnings Response Coefficient (ERC)?
3. Which earnings persistence and capital structure have the most dominant influence on the Earnings Response Coefficient (ERC)?
4. Why independent variables can influence the Earnings Response Coefficient (ERC)?

Research Significance

This study explores the interplay between earnings persistence, capital structure, and earnings response coefficients in the Indonesia Stock Exchange from 2011 to 2021, with sentiment as a moderating variable. The unique combination of these factors contributes to both academic knowledge and practical insights for companies and investors. The inclusion of sentiment adds a dynamic element to the analysis, considering its impact on investor responses. Through a longitudinal approach, the research aims to provide valuable insights for companies to evaluate their performance and make informed decisions. The expected benefits include strategic guidance for companies, informed decision-making for investors, and a basis for future policy examination, enhancing profitability and investor interest.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Earnings Response Coefficient

The ERC stands as a pivotal metric in financial analysis, originating from the seminal work of Ball and Brown in 1968. This metric plays a crucial role in gauging the correlation between unexpected earnings and stock returns, offering valuable insights into the intricate relationship between reported profits and stock price movements. ERC serves as a key indicator for investors and analysts navigating financial markets, especially in Indonesia, where external factors such as company size, growth opportunities, and the influence of Bank Indonesia add layers of complexity. Studies by researchers like (Mulyani, Sri, et al., 2007; Imroatussolihah, Ely, 2013; Bulutoding, Lince, et al., 2020) present diverse results, emphasizing the nuanced impact of factors like earnings persistence, capital structure, systematic risk, and CSR on ERC in the Indonesian financial landscape.

Furthermore, the multifaceted role of external entities, particularly Bank Indonesia, introduces additional dynamics to the financial landscape. As the central bank responsible for monetary policy and financial regulation, Bank Indonesia's decisions, notably regarding the BI 7-day Reverse Repo Rate, significantly influence liquidity, interest rates, and overall economic conditions. Stakeholders keenly observe these decisions, recognizing their implications for borrowing costs, consumer spending, and business profitability. The central bank's intricate dance involving interest rate policies, reserve requirements, and intervention in foreign exchange markets further contributes to the complexity of economic indicators that financial analysts must navigate when assessing the ERC and its determinants in the Indonesian context.

Earnings Persistence

Financial statements are crucial tools for corporate transparency and stakeholder decision-making, as highlighted by Abdulshakour, S.T. (2020). The significance of earnings quality, emphasizing the role of credibility in accounting profit information, is underscored in the literature, particularly in relation to investor response and market confidence. The concept of ERC introduced by Scott, W.R & O'Brien, P.C. (2020) further reinforces the market's ability to accurately perceive a company's performance, with a higher ERC indicative of quality earnings. Earnings persistence, as defined by Fatma, N. and Hidayat, W.

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(2020), emerges as a critical dimension, emphasizing the importance of sustained and reliable profits for predicting future earnings. The literature collectively calls for comprehensive assessments beyond traditional metrics like Return on Equity (ROE) to understand a company's financial health. Moreover, the intricate relationship between market volatility and investor behavior, as explored through the CBOE Volatility Index (VIX), suggests a complex interplay that future research could delve into. Integrating these strands, future studies could explore how earnings quality influences investor sentiment and market volatility in the context of evolving financial markets, technological advancements, and globalization. Such research would contribute to a more holistic framework for financial analysis and decision-making in a dynamic economic landscape.

Capital Structure

Capital structure decisions are pivotal in shaping a company's profitability and managing its financial risks. These risks involve meeting obligations and achieving targeted profit levels, with external loans introducing financial leverage. The level of debt directly correlates with financial risk, as greater debt amplifies risks due to increased interest payments and potential penalties during financial downturns. Capital, fundamental for business operations and expansion, is sourced internally through retained earnings and depreciation, and externally through creditors and contributors. The mix of debt, preferred stock, and common stock in capital structure decisions directly impacts shareholders' risk and expected returns. Leverage, utilizing assets and fixed-cost funding to enhance shareholder profits, introduces risks, particularly in deteriorating conditions. High leverage, characterized by a significant debt-to-equity ratio, can lead to increased interest expenses and lower earnings response coefficients for shareholders, as profits are seen benefiting creditors more. Empirical studies highlight determinants of earnings response coefficients, with factors like debt levels, growth rates, default risks, and company risk influencing shareholder responses. The debt-to-equity ratio is a commonly used measure, but its impact on earnings response coefficients is complex and varies across studies, emphasizing the intricate nature of capital structure decisions and their consequences on shareholder value and risk.

INSTITUTIONAL BACKGROUND

The Indonesia Stock Exchange (IDX), formerly known as the Jakarta Stock Exchange (JSX) until its merger with the Surabaya Stock Exchange in 2007, has experienced remarkable growth in recent years, solidifying its position as the fastest-growing stock exchange in Asia. As of September 2021, it boasted 800 listed companies, with a significant surge in total stock investors to 6.4 million from 2.5 million at the end of 2019. Indonesia's Market Capitalization, at 45.2% of its Nominal GDP in December 2020, underscores the exchange's economic significance. Trading on the IDX adheres to specific regulations, such as the requirement for stock units in round lots (1 lot = 100 shares) and price constraints outlined in IDX Regulation number II-A Kep-00023/BEI/04-2016. The IDX, situated in the Sudirman Central Business District, South Jakarta, near Pacific Place Jakarta, ensures that stock orders entered into the JATS NEXT-G conform to designated price ranges. Auto Rejection mechanisms, as mandated by the IDX Decree of Director Number Kep-00023/BEI/03-2020, are in place, particularly for initial public offerings and volume order limits exceeding 50,000 lots or 5% of a stock's listed shares. Additionally, for warrants, price processing through JATS Next-G aligns with or exceeds the underlying stock's closing price. Reference Prices for stock offerings are determined based on the previous day's closing price, with adjustments for corporate actions within a specified timeframe, consolidating the IDX's commitment to maintaining a regulated and efficient trading environment.

HYPOTHESIS

Earnings persistence acts as a critical factor shaping a company's profit quality and profoundly influencing market reactions. According to signaling theory, firms with a history of robust financial performance inspire greater trust and confidence from investors compared to those with a track record of underperformance. This trust becomes a pivotal driver of high ERC as investors, convinced by a company's sustained ability to generate earnings, react promptly and decisively in their decision-making processes (Henckel, Timo, et al. (2021). Furthermore, the correlation between earnings persistence and ERC is logically substantiated by research indicating the significant impact of investor sentiment on stock market returns and volatility. Positive sentiments lead to rapid price increases when good news is announced, while careful attention to bad news results in immediate and substantial negative responses, creating a dynamic relationship that underscores the positive connection between earnings persistence and ERC.

H1: There is a positive impact relationship between ERC and Earnings Persistence

The relationship between ERC and capital structure is not commonly explored in financial literature, and any hypothetical negative impact may be contingent on various factors. For instance, if a company has a high level of debt in its capital structure, investor concerns about financial risk associated with leverage could mitigate the positive impact of earnings on

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stock returns, potentially resulting in a lower ERC (Graham and Leary, 2011; Ali, Asgar, et al. 2021). Additionally, issues such as information asymmetry related to capital structure decisions and the influence of market conditions on investor sentiment could contribute to a less pronounced link between earnings and stock returns (Bessler, Wolfgang, et al., 2011; Al- Nasser, Alya, et al.,2021). However, it's crucial to recognize that financial markets are intricate, and the valuation of a company's stock involves a complex interplay of factors beyond just capital structure, including management quality, macroeconomic trends, and market dynamics (Frank, M.Z. and Goyal, V.K. (2009). Empirical analysis with specific financial data would be essential for a more precise understanding of the relationship between ERC and capital structure.

H2: There is a negative impact relationship between ERC and Capital Structure

METHODS

Data Collection

Table 1: Sample Data

Sample Criteria	Company Total
Indonesia Stock Exchange (Oct 23 rd , 2022)	810
Annual report (2011 - 2021) have not fully published	(590)
Annual report (2011 - 2021) have been fully published	309
Not stable stock volume liquidity	(45)
Total Sample	265

This research adopts a purposive sampling method, deliberately selecting companies listed on the Indonesia Stock Exchange (BEI) over an 11-year period (2011-2021) based on specific criteria. RStudio serves as the measuring tool, focusing on publicly traded entities to gain valuable insights into companies subject to market dynamics and investor scrutiny. The analysis hinges on fully published annual reports from 2011 to 2021, allowing for a comprehensive longitudinal examination to capture trends and changes in financial performance. To ensure data robustness, the study meticulously chooses companies with stable stock volume liquidity, emphasizing the importance of consistent market activity. This strategic sampling approach aims to provide in-depth insights into the impact of various factors on the performance of companies actively traded on the Indonesian stock market, contributing to a broader understanding of market conditions and financial dynamics over the specified period.

Concept Model

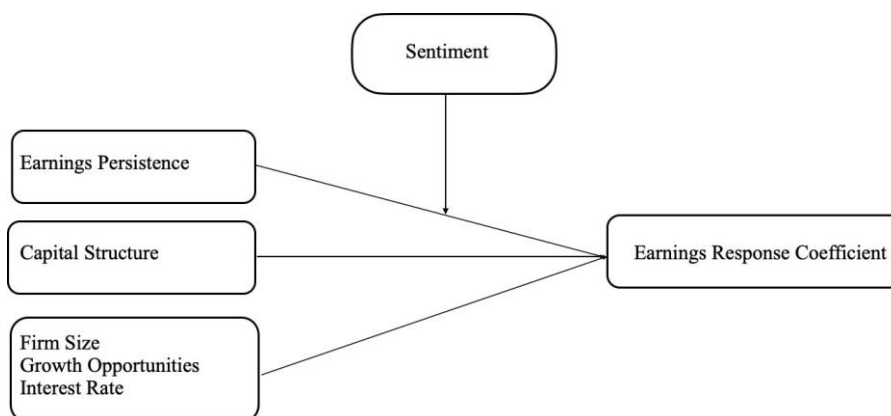


Figure 1: Model

The explanation of the research variables is as follows: The dependent variable in this study is the Earnings Response Coefficient (ERC), The independent variables used in this study are Earnings Persistence and Capital structure, The control variable used in this study is Firms Size, Growth Opportunities and Interest Rate. Last, the moderating variable used in this study is Sentiment.

Research Variable

1. ERC (β_1), the size of the abnormal return of a stock in response to the component of abnormal earnings (unexpected

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earnings) reported by the company that issued the stock (Scott, 2020):

$$CAR_{it} \pm = \sum_{t=-10}^{10} AR_{it}$$

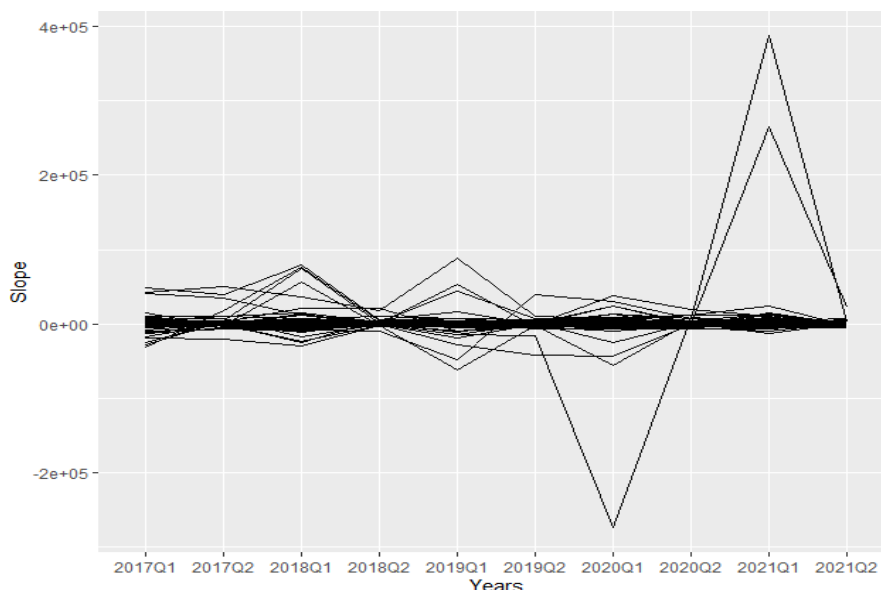


Figure 2: Rolling Test (Source: RStudio Processing)

Every Q1 starting from 2017 until 2021 indicates most of the corporate action and shareholder meetings in Q1. Especially, the negative response period only in 2020Q1 indicates the response of the transaction volume frequency to the stock price is strong and negative also human behavior to stock market condition is entering to economic slowing down and pandemic condition, which affects the stock market response. The positive responses period in 2021Q1 indicates the response of the transaction volume frequency to the stock price and that human behavior to the stock market and economy conditions is positive and stock transaction frequency is high.

2. Cumulative Abnormal Return (CAR) is a proxy for stock prices or market reaction. CAR is calculated when accounting earnings are published in financial statements, referring to research by Ardila (2012) and Anggraini (2015) in a short event window for 21 days (10 days before the announcement of the financial statements, 1 day after the announcement of the financial statements, and 10 days after the announcement of the Financial Report). CAR can be calculated by the following formula:

$$CAR_{it} = \beta_0 + \beta_1 UE_{it} + \varepsilon_{it}$$

3. Abnormal return is one of the indicators used to see the current state of the market. Abnormal Returns (AR) are calculated as follows:

$$AR_{it} = R_{it} - R_{mt}$$

4. Unexpected Earnings (UE), To measure unexpected Earnings Persistence (EPS), the random walk with drift model is assumed as the EPS generation process. This model, expected EPS can be stated as follows:

$$UE_{it} = \frac{EPS_{it} - EPS_{it-1}}{EPS_{it-1}}$$

5. Earnings persistence describes quality corporate profits and also proves that the company remains a going concern. Earnings persistence are calculated as follows:

$$ROE = \frac{NetIncome}{TotalEquity}$$

Capital structure, ERC for a highly leveraged firm is lower than for a firm with little or no debt, any good news passed on means that the debt holders get this benefit instead of the investors. Capital Structure are calculated as follows:

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$$Leverage = \frac{TotalLiability}{TotalEquity}$$

6. Firm size is a scale that can classify the size of the company (firm size) according to various ways between others by size of sales, total assets, and market capitalization. Firm size are calculated as follows:

$$SIZE = Ln(TotalAsset)$$

Ln: Natural Logarithm

7. Growth Opportunities, the meaning of the growth opportunity is the potential of the company to develop the operations of the company for the future by using investor funds to increase the value of the company. To measure the value of growth opportunities using the formula:

$$MBV = \frac{CurrentStockPrice * Outstandingshare}{TotalLiability - TotalAsset}$$

Interest Rate or the BI 7-Day (Reverse) Repo Rate instrument was introduced as the new policy rate due to its rapid influence on the money market, banking industry and real sector. Interest Rate used in this paper is downloaded from the Bank Indonesia website.

8. Sentiment, the principal component analysis is used to construct the investor sentiment composite index based on Chicago Board Options Exchange (CBOE) data. Volatility index (VIX) used in this paper is downloaded from the CBOE website.

Analysis Method

This analysis technique is used to determine the direction and magnitude of the influence of the dependent variable (earnings response coefficient), independent variables (earnings persistence and leverage), and control variable (firm size, growth opportunities, interest rate). The equations of the panel linear regression analysis models used are:

$$ERC_{it} = \beta_0 + \beta_1 ROE_{it} + \beta_2 LEV_{it} + \beta_3 SIZE_{it} + \beta_4 MBV_{it} + \beta_5 IR_{it} + \varepsilon_{it} \quad (1)$$

Consistent with *H1*, we need to further test the mechanism that ROE promotes ERC. As we discussed, high ROE may attract investor attention, so in periods with high sentiment, the positive impact of ROE on ERC should be larger. We apply interaction terms in a panel regression to test the argument.

$$ERC_{it} = \beta_0 + \beta_1 ROE_{it} + \beta_2 DER_{it} + \beta_3 SIZE_{it} + \beta_4 MBV_{it} + \beta_5 IR_{it} + \beta_6 VIX_t + \beta_7 ROE_{it} \otimes VIX_t + \varepsilon_{it} \quad (2)$$

ERC_{it}: Earnings Response Coefficient for firm *i* in year;

ROE_{it}: Earnings Persistence for firm *i* in year;

LEV_{it}: Leverage for firm *i* in year; *VIX_t*: Volatility Index in year; *SIZE_{it}*: Firm Size for firm *i* in year;

MBV_{it}: Growth Opportunities for firm *i* in year for firm *i* in year;

IR_{it}: Interest Rate in year;

RESULTS AND DISCUSSIONS

Table 2: Statistics Summary

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ERC	2915	-99.8252	99.6456	0.5418	25.2161
ROE	2915	-190.2680	185.1741	5.6340	24.1095
LEV	2915	-944.7400	2496.1400	167.1500	255.6238
SIZE	2915	22.3800	334.7400	28.7700	1.8831
MBV	2915	-1502.6000	1902.5100	145.4300	214.5515
IR	2915	3.5210	7.5420	5.7230	1.2320
VIX	2915	-12.3000	21.7700	17.4100	3.2695
Valid (listwise)	N2915				

Based on table 2, it is known that the number (N) is 2915 samples. The data used in this study are 265 companies multiplied by an observation period of 11 years, namely from 2011 to 2021 so the overall data is 11660. The research sample is financial

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sector companies listed on the Indonesia Stock Exchange from 2011-2021. The lowest earning response coefficient (ERC) of -99.8252, and The highest is 99.6456 also the value of the standard deviation for the Earning Response Coefficient (ERC) is 25.216081, meaning that on average, the level of investor confidence in the information content of earnings presented by the company has decreased. While the lowest value for earnings persistence (ROE) is -190.2680, the highest value for earnings persistence (ROE) is 185.1741 the average earnings persistence (ROE) is 5.6340 and the standard deviation is 24.109479. The earnings persistence, have positive mean values, implying that the firms averagely make profit in the sample period, as a reflection of the past economic growth.

Table 3: Multicollinearity Test

Model	TOL	VIF
ROE	0.9643	1.0370
LEV	0.7783	1.2849
VIX	0.9935	1.0066
SIZE	0.9252	1.0809
MBV	0.8324	1.2014
IR	0.9931	1.0069

Based on table 3, The independent variables (earnings persistence and leverage) have a Variance Inflation Factor (VIF) ≤ 10 or Tolerance (TOL) ≥ 0.10 . This means that all independent variables (earnings persistence and leverage) have no multicollinearity symptoms that occur in the regression model used.

Table 4: Autocorrelation Test

Model	Durbin-Watson	p value
1	1.9969	0.4430

Based on table 4, the value of Durbin Watson (DW) is 1.9969. According to the Durbin-Watson table regression model, there is no autocorrelation if $DU \leq DW \leq 4-DU$ (see in the DW table). So, it can be concluded this regression model has no autocorrelation.

Table 5: The impact of earnings persistence on ERC.

Independent and Control Variables	Model: The dependent variable ERC		
	Coefficient	T-statistic	p-value
Constant	-2.2093	-2.8422	0.0045 **
ROE	0.7177	2.7295	0.0063 **
LEV	-0.0023	-1.1967	0.2314
SIZE	-0.0015	-1.6196	0.1053
MBV	0.0008	0.3420	0.7323
IR	0.4606	1.2064	0.2277
R^2	0.0044		
Adjusted R^2	0.0027		
Hausman	0.9188		
Effect Type	Random		

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Statistical significance at the 10%, 5%, 1%, and 0.1% levels is indicated by *, **, and ***.

The panel regression results for *H1* indicate a positive and statistically significant coefficient of 0.0063 for earnings persistence (ROE), revealing a favorable impact on the Earning Response Coefficient. This implies that as the level of earnings persistence increases, there is a proportional rise in the Earning Response Coefficient. Essentially, the profitability demonstrated by companies on the Indonesia Stock Exchange contributes to their ability to sustain earnings over successive periods, influencing market reactions and sentiments. Investors respond positively to a consistent upward trend in profits from regular business operations. These findings resonate with Gurusinga and Pinem's (2019) study, supporting the notion that stock prices tend to rise in tandem with consistent profit growth. Moreover, the observed investor preference for meeting or exceeding profit expectations (Greenwood, R. and Shleifer, A., 2014) aligns with Suwardjono (2014) view on the significance of earnings as indicators of financial performance, influencing various decisions, including taxes, dividends, and overall investment strategies. So, the positive relationship between earnings persistence and the Earning Response Coefficient underscores the pivotal role of sustained profitability in shaping market dynamics and investor perceptions.

The regression analysis for *H2* yielded a capital structure (LEV) coefficient of 0.2314, suggesting a minimal impact of leverage on the Earning Response Coefficient (ERC). This implies that, based on the data, investors do not significantly factor a company's liabilities into their investment decisions. This result aligns with prior research by Hasanzade et al. (2013), indicating a consistent lack of a substantial relationship between leverage levels and ERC. Real-world observations support these findings, suggesting that investors may prioritize a company's potential for value creation over its debt load. In contrast to the theoretical expectation of higher income but also higher interest expenses with increased leverage, this study contends that judicious use of debt can enhance overall company performance, providing returns for both shareholders and creditors. This nuanced perspective challenges the traditional conceptual framework linking high leverage with increased profitability and elevated interest payments, emphasizing the importance of practical considerations in understanding financial dynamics.

Table 6: The moderating effect of sentiment

Independent and Control Variables	Model: The dependent variable ERC		
	Coefficient	T-statistic	p-value
Constant	-2.1168	-2.7288	0.0064 **
ROE	0.6848	2.6097	0.0063 **
VIX	-0.0084	-3.1734	0.0015 **
LEV	-0.0022	-1.1415	0.2537
SIZE	-0.0014	-1.5397	0.1236
MBV	0.0007	0.3211	0.7481
IR	0.4577	1.2004	0.2300
ROE x VIX	0.0003	3.2399	0.0012 **
R^2	0.0083		
Adjusted R^2	0.0060		
Hausman	0.9503		
Effect Type	Random		

Statistical significance at the 10%, 5%, 1%, and 0.1% levels is indicated by *, **, and ***.

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In the past subsection, we find that ROE significantly impacts ERC while leverage does not. effect. As we discussed in presenting *H1* the positive impact of ROE on ERC may be strengthened by high investor sentiment. We test the argument to provide further support for *H1* in this subsection. The test is performed by estimating the regression results of Eq. (9). Based on results reported in table 8. the value of the earnings persistence (ROE) moderated by sentiment (VIX) on ERC is 0.0012, which indicates sentiment strengthens the effect of earnings persistence on ERC. Earnings persistence, as illuminated through signaling theory and validated by the panel regression results, emerges as a pivotal factor influencing market reactions and investor sentiment. Signaling theory posits that a company's historical financial performance fosters investor trust, contributing to higher Earnings Response Coefficients (ERC). The positive coefficient from the panel regression results further substantiates this notion, indicating that an increase in earnings persistence (ROE) directly augments the Earnings Response Coefficient. This suggests that the profitability of companies listed on the Indonesia stock exchange significantly impacts market responses, with investors favorably reacting to sustained profit growth. These findings align with previous research and emphasize the integral role of consistent earnings in shaping investor confidence and influencing market dynamics. In essence, the interplay between earnings persistence, investor trust, and market reactions underscores the critical connection between a company's profit quality and its reception in the financial landscape

CONCLUSIONS

The results of analysis and hypothesis testing regarding the Effect of Profit Persistence and Leverage on Earning Response Coefficients in financial companies listed on the Indonesia Stock Exchange (IDX) for the period 2011-2021, can be concluded that:

1. The coefficient of determination is known to be Adjusted R square = 0.0044. So, the magnitude of the contribution Earnings Persistence and leverage of 0.44% and the rest is influenced by other factors outside this research.
2. There is an ERC response every Q1 starting from 2017 until 2021 indicating most of the corporate action and shareholder meetings in Q1. Especially, the negative response period only in 2020Q1 indicates the stock market condition is entering to economic slowing down and pandemic condition, which affects the stock market response. The positive responses period in 2021Q1 indicates stock market and economy conditions are positive and stock transaction frequency is high.
3. The value of the earnings persistence (ROE) is 0.0063 Indicates that the influence of earnings persistence on the Earning Response Coefficient is a positive impact. Value a positive coefficient means that any increase in the value of the earnings persistence will increase the value of Earning Response Coefficient.
4. The result of the Capital Structure (LEV) is 0.2314 This indicates that investors decisions about which companies to invest in cannot be influenced by the companies' liabilities.
5. The value of the sentiment (VIX) strengthen to the effect of earnings persistence on ERC is 0.0012. Companies that release profits on financial reports will trigger a market reaction by sentiment, it can affect investors' behavior and also directly affect stock market volatility.

Overall, based on data from Indonesia, there is a positive impact of earnings persistence on the earnings response coefficient and managed to explain it as the high investor sentiment in stocks of high earning quality. These findings supplement the literature on earnings response and our understanding of the market structure of Indonesia.

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REFERENCES

- 1) Abdulshakour, S.T. 2020. Impact of Financial Statements on Financial Decision Making, Open Science Journal, June.
- 2) Ali, Asgar, et al. 2021. Real Earnings Management and Stock Returns: Moderating Role of Cross-Sectional Effects, Asian

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Journal of Accounting Research Vol. 6 No.3, 2021 pp. 266-280 Emerald Publishing Limited 2443-4175 DOI 10.1108/AJAR-11-2020-0107.

- 3) Al-Nasser, Alya, et al. 2021. Investor Sentiment and The Dispersion of Stock Returns: Evidence Based on The Social Network of Investors, *International Review of Financial Analysis* Vol. 78, Nov 2021, 101910.
- 4) Ball, R. & Brown, P. 1986. An empirical evaluation of accounting income numbers, *Journal of Accounting Research*, 159-178.
- 5) Bessler, Wolfgang, et al. 2011. Information Asymmetry and Financing Decisions, *International Review of Finance*. 11:1, 2011: pp. 123-154.
- 6) Bulutoding, Lince, et al. 2020. The Connexion of Financial Ratio and Islamic Social Reporting (ISR) on Earning Response Coefficient with Firm Size as A Moderating, *International Journal of Research Science & Management*, Thomson Reuters. ISSN: 2349-5197.
- 7) CBOE. 2023. Chicago Board Options Exchange. www.cboe.com.
- 8) Cho, J., & Jung, K. 1991. Earnings Response Coefficients: a synthesis of theory and empirical evidence. *Journal of Accounting Literature*, 85-116.
- 9) Fatma, N. and Hidayat, W. 2020. Earnings Persistence, Earnings Power, and Equity Valuation in Consumer Goods Firms, *Asian Journal of Accounting Research*, Vol. 5 No.1 pp 3-13 Emerald Publishing Limited 2443-4175. DOI 10.1108/AJAR-05-2019-004.
- 10) Frank, M.Z. and Goyal, V.K. 2009. Capital Structure Decisions: Which Factors are Reliably Important, *Financial Management*, Spring pp 1 -37.
- 11) Graham, John R. and Leary, Mark T. 2011. A Review of Empirical Capital Structure Research and Directions for the Future, *The Annual of Financial Economics*, 2011,3:309-45.
- 12) Greenwood, R. and Shleifer, A. 2014. Expectations of Return and Expected Returns, Advance Access Publication.
- 13) Gurusinga, J.J. & Pinem, D.Br. 2019. Pengaruh Persistensi Laba dan Leverage terhadap Earning Response Coefficient, *Equity*, Vol. 19 No. 1.
- 14) Hasanzade. 2013. Factors Affecting the Earnings Response Coefficient: An Empirical study for Iran. *European online Journal of Natural and Social Sciences*, 2(3), 2551–2560. www.european-science.com
- 15) Henckel, Timo, et al. 2021. Belief adjustment: a double hurdle model and experimental evidence. *Experimental Economics* 25, 26–67 (2022).
- 16) IDX. 2022. Indonesia Stock Exchange. www.idx.com. Indonesia
- 17) Imroatussolihah. 2013. Pengaruh Risiko, Leverage, Peluang Pertumbuhan, Persistensi Laba dan Kualitas Tanggung Jawab Sosial Perusahaan terhadap Earning Response Coefficient pada Perusahaan High Profil, *Jurnal Ilmiah Manajemen* Vol.1, No. 1, pp.75-87.
- 18) Khan. Z.A and Hussanie, I. 2018. Shareholders Wealth Maximization: Objective of Financial Management Revisited, *International Journal of Enhanced Research in Management & Computer Applications*, ISSN: 2319-7471, Volume 7 Issue 3, March 2018, Impact Factor: 3,578.
- 19) Mulyani. Sri, et al. 2007. Faktor-Faktor yang Memengaruhi Earnings Response Coefficient pada Perusahaan yang Terdaftar di Bursa Efek Jakarta, *Journal of Accounting and Auditing Indonesia (JAAI)*, Vol.11 No. 1, hal 35-45.
- 20) Riyani, et al. 2023. Determinants of Indonesia Capital Market Reaction, *World Scientific and Engineering Academy and Society (WSEAS)*.
- 21) Scott, W.R & O'Brien, P.C. 2020. *Financial Accounting Theory*. 8th Ed. Canada: Pearson Prentice Hall Canada Inc.
- 22) Silalahi. 2014. "The Influence of Corporate Social Responsibility (CSR) Disclosure, Beta and Price to Book Value (PBV) on Earnings Response Coefficient (ERC) (Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange)", *Journal of Economics*, Vol. 22, No. 1, Accounting Study Program, Faculty of Economics, Riau University, Pekanbaru.
- 23) Suwardjono. 2014. *Teori Akuntansi Perkayasaan Pelaporan Keuangan edisi Ketiga*, BPFE Yogyakarta.
- 24) Wijaya, et al. 2020. Factors Affecting Earning Response Coefficient With Profitability as Moderating Variable in Manufacturing Companies, *Advance in Economics Business and Management Research* Vol. 145 Atlantis Press.



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