The Effect of Sustainability Reporting Quality, Stock Return, Return on Asset, and BOPO on Earning Management Moderated by Net Interest Margin in Banking Companies Listed on the Indonesia Stock Exchange

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Abstract: *At present, companies that care about environmental, social, and governance (ESG) are not only companies that are directly related to the environment, such as mining companies, but other companies that are far from being related to the environment are also becoming increasingly concerned about the Environment, Social, and Governance. The sample consists of Indonesian banking companies publicly traded on the Indonesian stock exchange. The overall sample size is 36 organizations, drawn from data spanning the years 2015 to 2022, and examined using Eviews. The objectives of this study are to examine the association between variables related to the quality of ongoing reporting and corporate performance in banking businesses listed on the IDX, which are moderated by the Net Interest Margin (NIM) to Earnings Management (EM). The study's findings indicate that SRQ has a negative effect on earnings management (EM), Stock Return (SR) has a negative effect on earnings management (EM), Return on Assets (ROA) has no effect on earnings management (EM), Cost of Operations to Income Operations (BOPO) has a negative effect on earnings management (EM), and the Net Interest Margin (NIM) moderates the effect of Sustainability Reporting Quality (SRQ), Stock Return (SR), Return on Assets (ROA), and earnings management (EM).*

Keywords: Earning Management, Sustainability Reporting Quality, Stock Return, Return on Assets, Cost of Operations to Income Operations (BOPO), Net Interest Margin

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1. Introduction

Pneumonia cases were discovered in Wuhan between December 12 and December 29, 2019. The Chinese government was the first to disclose these cases to the World Health Organization (WHO). The virus continued to spread over the next few months, and on March 11, 2020, the World Health Organization (WHO) proclaimed a global pandemic affecting over 121 countries. This circumstance compels all nations to enact laws to prevent the virus from propagating across the population, as the pandemic is deemed hazardous. The governments of several of the affected countries have instituted regulations, such as implementing regional quarantines, or lockdowns, as they are known.

President Joko Widodo's governance in Indonesia decided to enact Large-Scale Social Restrictions (PSBB) in order to prevent major effects from occurring if the Lockdown version of the regional quarantine was implemented, particularly for small communities or informal

workers. This decision was made after a more thorough analysis of the wider economic impact. In addition, the government has put in place a number of social programs that are supported by local governments through the provision of financial and economic incentives for the delivery of social assistance to COVID-19 pandemic victims.

Under every situation, company management must be able to carry out corporate operations as efficiently as possible. The company's sustainability, which is maintained by optimizing earnings management while also taking fair presentation into account in all of its operations, is something that stakeholders and shareholders hope management would keep in mind when making choices.

Stakeholders have given several global concerns pertaining to the environment, society, and government a great deal of attention. Several organizations have automatically included disclosures about their actions and sustainability reports in their annual reports, as this worldwide issue demonstrates that a company's value lies in how it runs its operations.

These days, businesses that are concerned with Economic, Social, and Governance (ESG) contain not just those that have a direct connection to the environment, like mining companies, but also those that are not directly related to the environment but are becoming more and more concerned with social and environmental issues. For instance, PT. CIMB Niaga Tbk, a banking company, was awarded a Bronze Award by a sustainability report grading agency. "The influence of the quality of sustainable reports, company performance, on stock returns moderated by earnings management in banking companies listed on the Indonesian stock exchange" is the title that the writers selected based on the aforementioned requirements.

2. Literature Review

2.1 Research Theory
2.1.1 Signal Theory (*Signaling Theory*)
This theory was first discovered by Michael Spence (1973) in his research entitled "*Job Market Signaling*". Spence said the following:

"A good firm can distinguish itself from a bad firm by sending a credible signal about its quality to capital markets. The signal will be credible only if the bad firm is unable to mimic the good firm by sending the same signal. If the cost of the signal is higher for the bad type than that of the good type firm, the bad type may not find it worthwhile to mimic, and so the signal could be credible"

The information asymmetry that exists today between many organizations and their owners has given rise to the signaling perspective. Signaling theory, like principle-agent theory, is primarily concerned with describing the behavior of two parties who have varying degrees of information. Those who possess additional information must transmit it to those who possess little or no information (Connelly et al. 2011). The signaling hypothesis is based on an organization's level of transparency with its stakeholders or the kind of information the business chooses to disclose to the outside world. Signaling theory is used to determine whether the management's sustainability reports and the company's performance signals the company's stock returns.

2.1.2 *Principal-Agent Theory*

The principal-agent theory is commonly used in accounting research and is often used in studies that focus on managers' incentives to provide information voluntarily to organizational stakeholders. Principal–agent theory assumes that in every relationship, there is a principal and an agent (Jensen and Meckin 1976). In principle-agent theory, people always want the best for the theory and seek to maximize their profits; in other words, there are two ways to control the agents: one is to reward the agent if the agent acts in a certain way; another is to use controls to check whether the agent behaves as the principal wishes. In most cases, the principal is the person who performs a task; an individual who accepts an assignment is called an agent; and the principal often wants to direct the agent in a certain way to obtain what the principal wants from his job.

The principal-agent theory is used to determine whether management under the principal and agent theory performs its function by implementing effective earnings management and exercising sound judgment in each of its operating activities to increase firm value.

2.1.3 Previous research

Shernaz Bodhanwala and Ruzbeh Bodhanwala with their research "Relationship between sustainable and responsible investing and returns: a global evidence." The findings for poor countries are in direct opposition to those for developed countries. In the case of developing countries, the performance of SRI portfolios over time demonstrates that the market does not place a premium on social and environmental responsibility. This study presents empirical evidence to practitioners, policymakers, and investors that SRI investments generate considerable excess returns or outperform the broader market index in industrialized countries. However, very few organizations have systematically evaluated ESG criteria in underdeveloped nations.

Junru Zhang, Hadrian Geri Djajadikerta, and Zhaoyong Zhang in their research "Does Sustainability Engagement Affect Stock Return Volatility? Evidence from the Chinese Financial Market" found evidence of a positive relationship between sustainability engagement and stock returns; corporate sustainability news releases demonstrate that volatility persistence can be largely explained by news flow, and the results demonstrate that sustainability news releases have the largest and most significant impact on volatility persistence. The popularity of Google search engines and general news follows. It has been demonstrated that news announcements on sustainability have a beneficial effect on stock return volatility. Additionally, we discover evidence that when sustainability is considered, prevailing sociocultural paradigms might impact market expectations. These findings have major implications for market efficiency and effective and efficient portfolio management decisions. Moch. Fathonya, Akhsanul Khaqb, Endri Endric in their research "The Effect of Corporate Social Responsibility and Financial Performance on Stock Returns." According to the study's findings, CFG and ROA have a significant impact on stock returns, whereas CSR has little effect. Simultaneous testing demonstrates that a company's stock returns are affected by a combination of CSR and financial success (CFG and ROA). This study demonstrates that corporations cannot rely on CSR activities to increase stock returns but must instead focus on financial performance.

Suhadak, Sri Mangesti Rahayu, and Siti Ragil Handayani in their research "GCG, financial architecture on stock returns, financial performance, and corporate value" GCG has a significant and negative relationship with stock returns; second, financial architecture has a significant and positive relationship with stock returns, financial performance, and firm value;

third, stock returns have a significant and positive relationship with financial performance and firm value; and fourth, financial performance has a significant and positive relationship with stock returns and firm value.

Maryyam Anwaar, in the study "Impact of Firms' Performance on Stock Returns (Evidence from Listed Companies of FTSE-100 Index London" It was discovered that while net profit margin and return on assets had a substantial positive effect on stock returns, profits per share had a significant negative effect. When earnings per share climb, all investors seeking short-term profits and aware of dividends sell their shares to the market, since the company's stock returns will soon decline due to oversupply, while the return on equity and quick ratios demonstrate a substantial effect. The stock returns are insignificant.

Mahdi Moardi, Mahdi Salehi, Simin Poursasan, and Homa Molavi in the research "Relationship between earnings management, CEO compensation, and stock return on the Tehran Stock Exchange" discovered that the quality of accruals and their components has an effect on stock returns. In other words, stock returns have a major impact on companies with and without opportunistic earnings management (OEM).

2.1.4 Research hypothesis
Based on a research journal entitled "The Quality of Sustainability Reports and Corporate Financial Performance: Evidence From Brazilian Listed Companies" According to Hong Yuh Ching, Fábio Gerab, and Thiago Henrique Toste, there is no association between accounting and market-based features and the quality of sustainable reporting, and while the quality of disclosure improved over the course of the study's years, the scores remained low. This was also true for the three sustainability pillars. Because Indonesia is still a developing country, he bases his work on the following:

Ha1: There is a significant negative effect of Sustainability Reporting Quality (SRQ) on earnings management (EM) of banking companies listed on the IDX.

Based on the research of Manish Bansal, Asgar Ali, and Bhawna Choudhary entitled " Real earnings management and stock return: the moderating role of cross-sectional effects." The empirical data indicate that investors view downward REM as a risk factor and hence discount the stock price more aggressively. On the other hand, the results indicate that investors interpret upward REM positively and, hence, continue to hold the stock even at a lower rate of return. This anomaly was robust for all possible moderation modes. The researcher sought to determine whether the influence was reciprocal based on this investigation and thus proposed the following hypothesis:

Ha2: Stock Return (SR) has a significant negative effect on the earnings management (EM) of banking companies listed on the IDX.

Based on research by Talebniya GH., Ravanshad entitled "Earning Management and Capital Structure." On the Tehran stock exchange, discretionary accruals and ROE have a negative relationship, except for the relationship with capital structure, while ROA has a positive association, except for the relationship with capital structure. The researchers recommended the following ideas based on the findings of the study:

Ha3: There is a significant positive effect of Return on Assets (ROA) on the level of Earning Management (EM) of banking companies listed on the IDX.

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Based on research Trinandari Prasetya Nugrahanti entitled "Risk Assessment and Earning Management in Banking of Indonesia: Corporate Governance Mechanisms " The empirical data indicate that risk assessment, as evaluated by Profile Risk, LDR, NPLs, and ROA, has a significant effect on the simultaneous decline in earnings management strategies. Through the R (R-square) value of 66.55 percent, These ratios can mitigate the impact of improved earnings management through an R-square value of 66.55 %. The test results indicated that employing the Board of Commissioners' independence, the size of the Audit Committee, the Risk Monitoring Committee, and the Quality of Corporate Governance as moderating variables did not significantly lower profit management methods.

Ha4: BOPO has a significant negative effect on the level of Earning Management (EM) of banking companies listed on the IDX.

Based on Yuksel's research, Sinemis Zengin entitled "Influencing Factors of Net Interest Margin in Turkish Banking Sector" Net Interest Margin (NIM) was found to be detrimental to non-interest income, non-performing loans, total assets, and exchange rates. Based on these findings, it was concluded that banks should prioritize asset quality to raise their Net Internet Margin (NIM). Based on the study's findings that banks should prioritize asset quality over NIM, researchers are interested in learning more about the relationship between NIM and Earnings Management (EM). They propose the following research hypotheses:

Ha5: Net Interest Margin (NIM) weakens the negative influence of Quality Sustainability Reporting (QSR) on the earnings management (EM) of banking companies listed on the IDX.

Based on Yuksel's research, Sinemis Zengin, entitled "Influencing Factors of Net Interest Margin in Turkish Banking Sector" found that banks should focus on asset quality, not earnings quality, to increase their Net Interest Margin (NIM). Because Stock Return (SR) is one of the instruments related to the market appreciation of company profits, researchers are interested in examining whether NIM moderates Stock Return (SR) on earnings management (EM) and propose the following research hypothesis:

Ha6: The Net Interest Margin (NIM) weakens the negative effect of stock returns (SR) on earnings management (EM) of banking companies listed on the IDX.

Based on Serhat Yuksel's research, Sinemis Zengin entitled "Influencing Factors of Net Interest Margin in Turkish Banking Sector" found that banks should focus on asset quality, not earnings quality to increase their Net Interest Margin (NIM). Because Return on Assets (ROA) is one of the instruments related to company profits, researchers are interested in examining more deeply whether NIM moderates Return on Assets (ROA) in earnings management (EM) and propose the following research hypothesis:

Ha7: The Net Interest Margin (NIM) strengthens the positive influence of Return on Assets (ROA) on the earnings management (EM) of banking companies listed on the IDX.

Based on Serhat Yuksel's research, Sinemis Zengin entitled "Influencing Factors of Net Interest Margin in Turkish Banking Sector" found that banks should focus on asset quality, not earnings quality to increase their Net Interest Margin (NIM). Since BOPO is one of the instruments related to company profits, researchers are interested in examining whether NIM moderates BOPO on earnings management (EM) and propose the following research hypothesis:

Ha8: The Net Interest Margin (NIM) weakens the negative influence of Operating Expenses / Operating Income (BOPO) on the (EM) of banking companies listed on the IDX.

3. Research Method

3.1 Research design

The research design used is quantitative research, which uses quantitative methods, namely research methods that aim to quantitatively describe social phenomena or phenomena or analyze how social phenomena or phenomena that occur in society are interconnected. The level of data analysis used was company data obtained using cross-sectional regression.

3.2 Data collection strategies and methods

The data used are secondary data originating from the Indonesia Stock Exchange, by conducting structured observations for all financial reports and company sustainability reports from 2015 to 2022, with a total population of 42 banking companies listed on the Indonesian stock exchange.

Table 1: Process Taking Samples

Description	Amount
Number of Banks listed on the Indonesia Stock Exchange	42
Number of Banks listed on the IDX that do not have complete 2015 – 2022 data	19
Number of selected samples	23

Source: Secondary Data processed

3.3 Research Variables and Definition of Operational Variables
3.3.1 Research Variables

The variables in this study consisted of:
a. Dependent Variable
   The dependent variable is a variable that the independent variable has an effect on. In this study, the dependent variable or dependent variable is *Earning Management (EM)* as Y.
b. Independent Variable
   The independent variable is one that has the potential to influence the dependent variable. The study's independent variables are SRQ (X_1), SR (X_2), ROA (X_3), and BOPO (X_4).
c. Moderating Variables
   The moderating variable is one that enhances or diminishes the independent variable's influence on the dependent variable. The moderating variable in this study is the *Net Interest Margin (NIM)*.

3.3.2 Operational Definition

Variables that are used in the research of this are:
a. Dependent Variable
   Earning Management is the dependent variable in this study (EM). Based on Kiridaran Kanagaretnam et al.'s research with the title *" Earnings Management to Reduce Earnings Variability: Evidence from Bank Loan Loss Provisions"* Using the measurement of *Earning Management (EM)* as follows:

$$LLPit = \alpha0 + \alpha1COit + \alpha2LOANit + \alpha3NPAit + \alpha4\Delta NPA(it-1) + \varepsilon it$$
$$NDLLPit = \alpha0 + \alpha1COit + \alpha2LOANit + \alpha3NPAit + \alpha4\Delta NPA(it-1) + Zit$$
$$DLLPit = TAit - NDAit$$

b. Independent Variable
1) The independent variables in the study include the ratio of SRQ, ROA, BOPO, EM.
X1: *Sustainability Reporting Quality* (SRQ), this ratio is used to measure the quality level of *Sustainability Reporting* by using the combined GRI and GRI G4 indexes, because the data taken is from 2015 to 2019, where the 2015 data in sustainability reporting still uses the GRI reference. G4 until 2016 while 2017 to 2019 has used the GRI Standard. Each reporting component in the index will be given a weight of 1 point with a total combined index weight of 174 points. The use of this index is following Gunawan Juniati and Abadi Kumalawati's research entitled *" Content analysis method: a proposed scoring for quantitative and qualitative disclosures "* which gives qualitative and quantitative weight to each disclosure under the GRI Standard. For the purposes of this study, we modified the index by combining it with the GRI G4 and GRI Standard indexes and only used 1 point for the disclosed GRI standard and zero for the undisclosed GRI standard.

2) X2: *Stock Return* (SR), this ratio is used to measure stock returns. Stock Return (SR) can be measured by comparing the current stock value minus the previous stock value divided by the previous stock value. SR can be formulated as follows:

$$SR= \frac{\text{Current share value-Previous share value}}{\text{Previous share value}}$$

3) X3: *Return On Assets* (ROA), this ratio is used to measure the increase or decrease in the Bank's management ability to earn profits in managing assets.
Ratios *Return on Assets (ROA)* can be formulated as follows:

$$ROA= \frac{\text{Profit before tax} \times 100\%}{\text{Average total assets}}$$

4) X4: Cost of Operations to Income Operations (BOPO), this ratio is used to measure the increase or decrease in the ability of management of the Bank in controlling the cost of operations of the revenue operations. The ratio of Cost of Operations to Income Operations (ROA) can be formulated as follows:

$$BOPO= \frac{\text{Total Operating Expenses} \times 100\%}{\text{Total Operating Income}}$$

c. Moderating Variables.
The net interest margin serves as a moderating variable in this investigation (NIM). The net interest margin (NIM) is a profitability statistic used by banks and other financial institutions to determine their capacity to produce net interest revenue. This ratio is also an indicator of the company's financial health and future growth. The formula for calculating NIM is as follows:

$$NIM= \frac{\text{Net Interest Income}}{\text{Productive assets}}$$

3.3.3 Data analysis method
Statistical data processing is critical in this study as it yields research conclusions. The calculation of research model analysis data is a data processing procedure. Prior to drawing

conclusions, data analysis must be performed to ensure that the research findings are accurate. Therefore, this research was conducted using statistical methods assisted by the EVIEWS 10 program.

3.3.4 Panel Data Regression Model Selection.
Based on the Chow test, Hausmen test, and LM test, the following conclusions and the panel data regression model selection table:

Table 2: Model test

Model test	P-value
Chow test	0.0977
Hausmen test	0.5389
LM Test	(0.3030)

Based on the model test above, wherein the chow test p-value <0.1, between the alternative common effects and fixed effects, the best model is the fixed effect. For the Hausmen test between fixed effects and random effects, p-value <0.1 is obtained, so the best model chosen is a fixed effect. So, the best model test is to use fixed effects.

4. Results

4.1 Descriptive Analysis
In this study, a descriptive analysis was used to demonstrate the condition of the data. The following is a summary of the results of the descriptive analysis of the dependent variable, namely earnings management (EM), and the independent variables, namely Sustainability Reporting Quality (SRQ), Stock Return (SR), Return on Assets (ROA), and Cost of Operations to Income Operations (BOPO); the moderating variable is Net Interest Margin (NIM). The results of the descriptive analysis are as follow:

Table 3: Descriptive Analysis Results

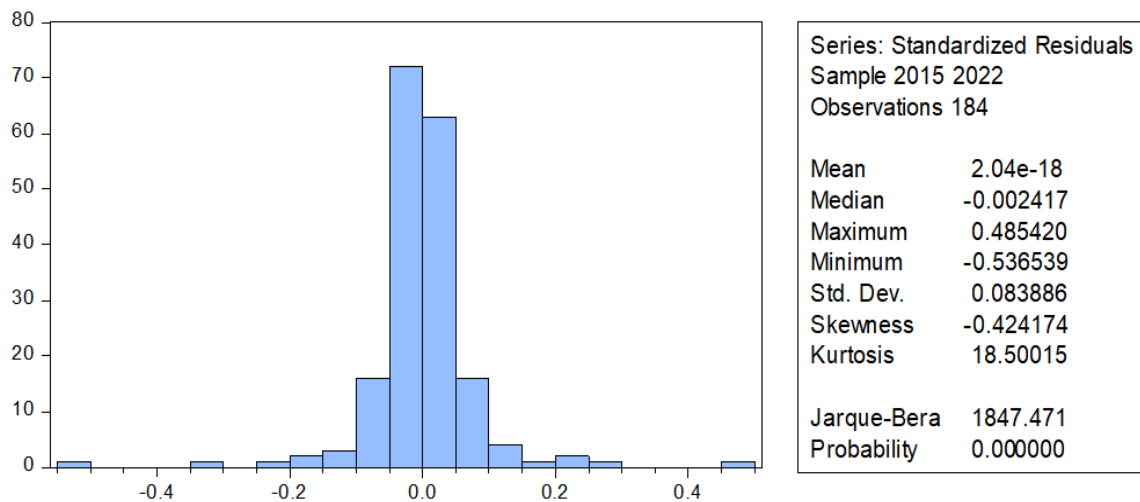| Variable	Minimum	Maximum	Mean	Std. Deviation	Observations
EM	-0.490000	0.510000	0.032935	0.087191	184
SRQ	0.000000	0.730000	0.259293	0.184726	184
SR	-0.910000	3.490000	0.087391	0.542897	184
ROA	-0.100000	0.040000	0.012065	0.020936	184
BOPO	0.440000	1.960000	0.875054	0.226306	184
NIM	0.000000	0.120000	0.047935	0.020884	184

Source: Output Results *Eviews*

The results of the statistical analysis show the value of the minimum, maximum, average, and standard deviation of each variable. Table 4.1 indicates that the variable earnings management (EM) with a sample size of 184 was obtained, with the lowest score of -0.490000 and the highest score of 0.510000 with an average value of 0.032935 and a standard deviation of 0.087191.

The (SRQ) with a sample size of 184 obtained the lowest score of 0.000000 and the highest score of 0.730000, with an average value of 0.259293 and standard deviation of 0.184726. Stock Return (SR) with a sample size of 184 obtained the lowest score of -0.910000 and the highest score of 3.490000, with an average of 0.087391 and a standard deviation of 0.542897.

Return on Assets (ROA) has a sample size of 184, the lowest value is -0.100000, and the highest is 0.040000, with an average value of 0.012065 and a standard deviation of 0.020936. Operating Expenses / Operating Income (BOPO) with a sample size of 184, the lowest score of 0.440000, and the highest of 1.960000, with an average score of 0.875054 and a standard deviation of 0.226306.

4.2 Normality test
The probability value of the jarque fallow is 0.000000, which is less than the conventional normalcy threshold of 0.05, indicating that the data in this study are not normally distributed.

	Series: Standardized Residuals Sample 2015 2022 Observations 184	
Mean	2.04e-18
Median	-0.002417
Maximum	0.485420
Minimum	-0.536539
Std. Dev.	0.083886
Skewness	-0.424174
Kurtosis	18.50015
Jarque-Bera	1847.471
Probability	0.000000

4.3 Correlation test
The correlation value demonstrated the multicollinearity test. The multicollinearity test results in Table 4.3 indicate that there is no significant correlation between independent variables greater than 0.90 (Ghozali, 2013:83), implying that independent variables are not multicollinear.

Table 4: Correlation test

	SRQ	SR	ROA	BOPO	NIM
SRQ	1.0000000				
SR	-0.094224	1.0000000			
ROA	0.267422	0.000332	1.0000000		
BOPO	-0.271645	0.020639	-0.859134	1.0000000	
NIM	0.195233	-0.008623	0.602197	-0.489862	1.0000000

Source: Results of data processing

4.4 Regression analysis test
The analysis in this study uses the dependent variable Earning Management (EM) and the independent variables Sustainability Reporting Quality (SRQ), Stock Return (SR), Return on Assets (ROA), Cost of Operations to Income Operations (BOPO), and the moderating variable Net Interest Margin (NIM). Data were processed using the program Eviews (Econometric Views) 10 for Windows. The model and results of the moderation analysis are as follows.

$$Y = \beta_0 + \beta_1 QSR + \beta_2 SR + \beta_3 ROA + \beta_4 BOPO + \beta_5(SRQ \times NIM) + \beta_6(SR \times NIM) + \beta_7(ROA \times NIM) + \beta_8(BOPO \times NIM) + \varepsilon$$

Table 5: Regression analysis test

Variable	Prediction	Coefficient	t-Statistics	Prob.	Description
C		0.340991	2.761371	0.0064	
SRQ	-	-0.219568	-2.261101	*0.0250	Significant
SR	-	-0.067868	-2.564985	*0.0112	Significant
ROA	+	-1.348883	-1.163217	0.2463	
BOPO	-	-0.235640	-2.050077	*0.0419	Significant
SRQ*NIM	+	3.529207	1.874656	**0.0625	Significant
SR*NIM	+	1.063103	1.978590	*0.0494	Significant
ROA*NIM	+	72.67833	2.166953	*0.0316	Significant
BOPO*NIM	+	6.732846	1.825695	**0.0696	Significant
R-Squared			0.126777		
Adjusted R2			0.081610		
F-Statistics			2.806871		
Prob (F-Stat)			0.004215		

Source: Data Processing

The above equation can be expressed as follows:

a. Value constants were obtained by 0.340991, which means that if the independent variable is zero, then the magnitude of EM is 0.340991 and vice versa.

b. The SRQ regression coefficient value of 0.219568 is negative, which means that every increase in SRQ will decrease EM by 0.219568, and vice versa.

c. The SR regression coefficient value of 0.067868 is negative, which means that every increase in SR will decrease EM by 0.067868, and vice versa.

d. The ROA regression coefficient value of 1.348883 is negative, which means that every increase in ROA will decrease EM by 1.348883, and vice versa.

e. The BOPO regression coefficient value of 0.235640 is negative, which means that every increase in BOPO will decrease EM by 0.235640 and vice versa.

f. The regression coefficient value of SRQ*NIM, which is an SRQ moderation with an EM of 3.529207, is positive, which means that every increase in SRQ*NIM will increase EM by 3.529207 and vice versa.

g. The regression coefficient value of SR*NIM, which is SR moderation with an EM of 1.063103, is positive, which means that every increase in SR*NIM will increase EM by 1.063103, and vice versa.

h. The regression coefficient value of ROA*NIM, which is a moderating ROA with an EM of 72.67833, is positive, meaning that every increase in ROA*NIM will increase EM by 72.67833 and vice versa.

i. The regression coefficient value of BOPO*NIM, which is BOPO moderation with an EM of 6.732846, is positive, which means that every increase in BOPO*NIM will increase EM by 6.732846, and vice versa.

4.5 F Statistic Test

Based on the calculation results presented in Tables 4.4. shows that this equation model has a calculated F value of 2.806871 and a probability value smaller than 0.05, that is, 0.004215. It can be concluded that Sustainability Reporting Quality (SRQ), Stock Return (SR), Return on Assets (ROA) and Operating Expenses / Operating Income (ROA) are influenced significantly by simultaneously against variable earnings management (EM).

4.6 Discussion

The results of the research on the effects of Sustainability Reporting Quality (SRQ), Stock Return (SR), Return on Assets (ROA), and Operating Expenses/Operating Income (BOPO) on earnings management (EM) moderated by Net Interest Margin (NIM) are explained as follows:

1) Effect of *Sustainability Reporting Quality (SRQ)* on *Earning Management*

   The first hypothesis, namely that Sustainability Reporting Quality (SRQ) has a significant negative effect on earnings management (EM), is accepted. The results of the t-statistical test show that Sustainability Reporting Quality (SRQ) has a significantly negative effect on earnings management (EM). These results are inconsistent with the research entitled "The Quality of Sustainability Reports and Corporate Financial Performance: Evidence From Brazilian Listed Companies" According to scholars Hong Yuh Ching, Fábio Gerab, and Thiago Henrique Toste, there is no correlation between accounting and market-based characteristics or quality. Despite the improvements in the quality of disclosure throughout the course of the study, the score remained low.

2) Effect of *Stock Return (SR)* on *Earning Management (EM).*

   The second hypothesis, Stock Return (SR), has a significant negative effect on earnings management (EM) and is accepted. The results of the test statistic show that the Stock Return (SR) is negatively influenced by earnings management (EM). These results prove that there is a reciprocal effect between stock returns (SR) and earnings management (EM), whereas the previous study by Manish Bansal, Asgar Ali, and Bhawna Choudhary, entitled " Real earnings management and Stock Return: the moderating role of cross-sectional effects." As a result of the empirical evidence, investors interpret downward REM as a risk factor, and hence, discount the stock price more aggressively.

3) Effect of *Return on Assets (ROA)* on *Earning Management (EM)*

   The third hypothesis, that Return on Assets (ROA) has a significant positive effect on earnings management (EM), is rejected. The results of the t-test show that Return on Assets (ROA) has no negative effect on Earning Management (EM) in a negative direction. This result is inconsistent with the research of Talebniya GH., Ravanshad entitled "Earning Management and Capital Structure." They found that discretionary accruals and ROE had a negative relationship, except for the positive relationship between capital structure and ROA.

4) Operational Expenses/Operational Income (BOPO) affect *Earning Management (EM)*

   The fourth hypothesis, namely Operating Expenses/Operational Income () has a significant negative effect on earnings management (EM). The t-test results show that BOPO has a significant negative effect on ((EM). The results of this study are consistent with the research of Trinandari Prasetya Nugrahanti entitled "Risk Assessment and Earning Management in Banking of Indonesia: Corporate Governance Mechanisms " which indicates that risk assessment, as evaluated by Profile Risk, LDR, NPLs, and BOPO, has a significant effect on the drop in profit management strategies concurrently.

5) *Net Interest Margin (NIM)* moderates the effect of *Sustainability Reporting Quality (SRQ)* on *Earning Management (EM)*

   The fifth hypothesis, namely Net Interest Margin (NIM), that weakens the effect of Sustainability Reporting Quality (SRQ) on earnings management (EM) is accepted. The results of the t-test show that the Net Interest Margin (NIM) can weaken the effect of Sustainability Reporting Quality (SRQ) on earnings management (EM), meaning that the

Net Interest Margin (NIM) affects the strength of the relationship between the independent and dependent variables.

6) *Net Interest Margin (NIM)* moderates the effect of *Stock Return (SR)* on *Earning Management (EM)*

The sixth hypothesis, namely, the Net Interest Margin (NIM), weakens the effect of stock returns (SR) on earnings management (EM). The results of the t-test show that the Net Interest Margin (NIM) can weaken the effect of stock returns (SR) on earnings management (EM), meaning that the ((NIM) weakens the relationship between the independent variable and the dependent variable.

7) *Net Interest Margin (NIM)* moderates the effect of *Return on Assets (ROA)* on *Earning Management (EM)*

The seventh hypothesis, namely Net Interest Margin (NIM), strengthens the effect of Return on Assets (ROA) on earnings management (EM). The t-test results show that the Net Interest Margin (NIM) can moderate the effect of Return on Assets (ROA) on earnings management (EM), meaning that the ((NIM) affects the strength of the relationship between the independent and dependent variables.

8) *Net Interest Margin (NIM)* moderates the effect of Operating Expenses/Operating Income (BOPO) on *Earning Management (EM)*

The eighth hypothesis, namely Net Interest Margin (NIM), which weakens the effect of Operating Expenses/Operational Income (BOPO) on earnings management (EM), is accepted. The results of the t-test show that the Net Interest Margin (NIM) weakens the effect of operating expenses/income (BOPO) on earnings management (EM), meaning that the (NIM) weakens the relationship between the independent variable and the dependent variable.

5. Conclusion

By determining the impact of Sustainability Reporting Quality (SRQ), Stock Return (SR), Return on Assets (ROA), Operating Expenses/Operating Income (BOPO), and the moderating effect of Net Interest Margin (NIM), this study adds to the body of knowledge on earnings management (EM). The study's conclusions demonstrate that, while Net Interest Margin (NIM) has a moderate impact on Sustainability Reporting Quality (SRQ), stock returns (SR), return on assets (ROA), and operating expenses or operating income (BOPO), it has a moderate impact on earnings management (EM). Additionally, stock returns have a significant negative impact on earnings management (EM), and return on assets (ROA) has no effect on earnings management (EM).

It is recommended that banking companies not only focus on generating profits and company performance, but also on how to add quality sustainable activities and reporting. This will attract investors who are focused on ESG to company stocks in Indonesia that have quality sustainable activities and reporting, which in and of itself can increase the rate of return of shares / stock return (SR). Previous studies have shown that sustainability reporting factors do not affect financial information in developing countries, while an opposite outcome is obtained in developed countries. Based on these findings, it can be concluded that the activity and reporting of Sustainability Reporting in Indonesia does not yet enjoy the trust of investors focusing on ESG.

This study was carried out between 2015 and 2022 utilizing two distinct references: the GRI-G4 (2015–2016 period) and the different GRI standards (2017–2022), as well as the company's preparedness throughout that time, which was still expected to show little concern for the sustainability report. Further research on the evaluation of sustainable report quality is anticipated in the future, encompassing not only the banking sector but also other businesses.

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