

THE IMPACT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE ON CORPORATE VALUE: THE ROLE OF REAL EARNING MANAGEMENT AS MODERATING VARIABLE

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Abstrak

Tujuan penelitian ini adalah untuk memberikan bukti empiris mengenai pengaruh *Environmental, Social, dan Governance* (ESG) terhadap nilai perusahaan. Penelitian ini juga menguji peran *real earnings management* (REM) sebagai variabel moderasi dalam hubungan tersebut. Sampel kami adalah perusahaan non-keuangan yang terdaftar di Bursa Efek Indonesia periode 2012-2020. Tobin's Q digunakan untuk mengukur nilai perusahaan. ESG diukur menggunakan skor ESG yang dikeluarkan oleh Thomson Reuters. REM dihitung dengan menggabungkan perhitungan arus kas abnormal, biaya produksi abnormal, serta biaya diskresioner abnormal. Hasil pengujian statistik menunjukkan bahwa ESG mempengaruhi nilai perusahaan. Hasil penelitian ini mendukung temuan literatur terdahulu yang secara empiris menemukan bahwa praktik ESG dapat meningkatkan nilai perusahaan sebab investor telah beranggapan bahwa ESG merupakan nilai yang relevan dalam pengambilan keputusan. Selain itu, hasil statistik juga menunjukkan bahwa REM tidak terbukti memiliki efek moderasi pada pengaruh ESG terhadap nilai perusahaan, namun REM memiliki pengaruh terhadap nilai perusahaan. Hasil penelitian ini mendukung temuan literatur terdahulu yang secara empiris menemukan bahwa praktik REM yang dilakukan oleh perusahaan akan menurunkan nilai perusahaan apabila terdeteksi oleh investor. Penelitian ini memiliki beberapa keterbatasan. Pertama, penelitian ini hanya menggunakan data ESG yang disediakan oleh Thomson Reuters dengan kelengkapan data yang masih minim sehingga belum cukup mencakup kebutuhan data yang dibutuhkan. Kedua, penelitian ini hanya berfokus pada sektor non-keuangan.

Kata Kunci: lingkungan; nilai perusahaan; manajemen laba real; tanggung jawab sosial; tata Kelola

JEL Code: M14; M41; G32; G34

Abstract

The purpose of this study is to provide empirical evidence on the influence of Environmental, Social, and Governance (ESG) on corporate value. The study also examined the role of real earnings management (REM) as a moderation variable in the relationship. Our sample is non-financial companies listed on the Indonesia Stock Exchange for the period 2012-2020. Tobin's Q is used to measure the value of a company. ESG is measured using ESG scores issued by Thomson Reuters. REM is calculated by combining abnormal cash flow calculations, abnormal manufacturing costs, and abnormal discretionary costs. The results of statistical testing show that ESG affects the value of the company. The results of this study support the findings of previous literature, which empirically found that ESG practices can increase company value because investors have assumed that ESG is a relevant value in decision-making. In addition, statistical results also show that REM is not proven to have a moderating effect on the effect of ESG on company value, but REM has an influence on company value. The results of this study support the findings of previous literature, which empirically found that REM practices carried out by companies will reduce company value if detected by investors. The study had some limitations. First, this study only uses ESG data provided by Thomson Reuters with minimal data completeness, so it does not adequately cover the data needed. Second, the study only focused on the non-financial sector.

Keywords: environment; firm value; governance; social responsibility; real earnings management

JEL Code: M14; M41; G32; G34

INTRODUCTION

Various parties have attempted to respond to issues related to the environment, one of which is investors. [Constantinescu et al. \(2021\)](#) stated that over the past decades, the focus of investors has shifted; namely they are not only interested in the financial aspects of the company but also interested in the value creation potential and sustainable development that can be carried out by the company. This change in investor focus has encouraged corporate managers not to maintain traditional management methods that only focus on financial performance but also to focus on increasing sustainability by pursuing financial and non-financial performance that focuses on environmental, social, and governance aspects (environmental, social), and governance or ESG). ESG has become one of the global trends as a potential value creation and sustainable development that can be carried out by companies.

The link between ESG and company value has been proven from a survey conducted by [Global Schroders in 2022](#). The survey found that more than two-thirds, or 68% of people who classify themselves as having expert knowledge in investing, believe that sustainable investing is the only way to ensure profitability in the long run. [Inderst & Stewart \(2018\)](#) presented other evidence showing that based on the 2017 Global Sustainable Investment Alliance, the value of ESG-based investments grew by a quarter to 23 trillion USD in the last two years. Furthermore, [Boffo et al. \(2020\)](#) stated that a portfolio that is globally worth more than 17.5 trillion USD has been professionally managed by integrating key elements of ESG assessment.

Research related to how the impact of ESG on company value has been carried out by several previous researchers. These studies include research conducted by [Yu et al. \(2018\)](#) regarding the extent to which ESG disclosure will have an impact on firm value. The research shows that ESG data is relevant to company value. The results of this study indicate that ESG transparency can be viewed as additional non-financial information that provides insight for investors and increased ESG disclosure can reduce information symmetry and investors' agency costs. The results of this study are in line with the results found by [Aboud & Diab \(2018\)](#). [Aboud & Diab \(2018\)](#) found higher firm value for companies listed on the ESG stock index compared to the EGX100 stock index and all companies listed on the Egyptian stock market. In addition, the researcher also found that companies with higher rankings in the ESG stock index have higher corporate values as measured by Tobin's q.

Contrary to the two studies above, the research conducted by [Yoon et al. \(2018\)](#) show that for companies that are in environmentally sensitive industries, the value creation effect of corporate social responsibility (CSR) practices is smaller compared to companies that are not included in environmentally sensitive industries. These findings may be related to the perspective of Korean society on environmental issues. Koreans have tried to find out overseas factors to solve the pollution problem but have paid limited attention to the domestic reasons behind the current air pollution problem. Such limited attention may encourage investors in the Korean market to place less value on environmentally sensitive industrial CSR practices. The same result was also shown by [Folger-Laronde et al. \(2020\)](#) analyzed the relationship between ESG ratings and the financial performance of ETFs (Exchange Traded Funds) during Covid-19 in Canada. They conclude that a higher level of ETF sustainability performance does not protect the investment from financial loss during a severe market downturn.

Lower profitability as a result of implementing ESG-based activities can be a reason for company managers to practice earnings management. This is in line with what was stated by [Bartov & Mohanram \(2004\)](#), namely, one of the reasons managers do earnings management is the desire to remain profitable. This objective relates to the assessment of investors who see company profits as an indicator to assess company performance.

Lower profitability as a result of implementing ESG-based activities is used by managers as a tool to cover up opportunistic behavior ([Velayutham, 2018](#)). If the company uses ESG performance as a greenwashing policy, then the company can also be actively involved in earnings management. In line with the greenwashing policy and opportunistic management behavior and because REM is not nearly detectable by other stakeholders, senior managers will simultaneously increase their REM activities because it is not realized by stakeholders ([Velte, 2020](#)).

This earnings management practice is a phenomenon that must be considered in the world of capital markets. According to [Sulistyanto \(2008\)](#), in general, earnings management is defined as an attempt by company managers to intervene or influence the information in financial reports with the aim of tricking stakeholders who want to know company performance. [Whelan & McNamara \(2004\)](#) stated that earnings management can be used as an indicator of earnings reliability. Therefore, if it is indicated that the company's financial information contains earnings management, then this information cannot be relied upon as a basis for making investment decisions. REM's relevance to firm value has been supported by several empirical findings. [Farooqi et al. \(2014\)](#) and [Tulcanaza-Prieto & Lee \(2022\)](#) found that REM has a negative impact on firm value. This finding is in line with [Roychowdhury's \(2006\)](#) statement which states that real earnings management can reduce firm value because this form of earnings manipulation can increase profits in the current period but has a very negative impact on the company's future cash flows.

Based on the description above, it can be seen that ESG plays an important role in relation to company value. ESG serves as a guide in assessing whether a company is good or not and provides an overview of the company's image in the eyes of the public and investors. Responses from the public and investors regarding ESG performance and company sustainability will have an impact on company value so that company value can be influenced by ESG. Several previous studies conducted an analysis of the effect of ESG and firm value with a focus on short-term analysis involving around 3-5 years of observation. For this reason, further analysis is still needed regarding the effect of ESG and firm value in the long term.

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This research involved ten years of observation. Observations for these ten years are based on the statement that ESG is a long-term investment that can be made by companies ([OECD, 2021](#)). Therefore, the authors justify that ten years of observations have been able to see the long-term impact of ESG on company value. This study uses a measurement of real earnings management because REM practices are more prone to be carried out by senior

managers because stakeholders do not realize this (Velte, 2020). In addition, the use of REM in measuring earnings management practices is also based on a statement (Roychowdhury, 2006), which states that accounting research that draws conclusions about earnings management based solely on accrual arrangements may be invalid. The results of a survey conducted by Graham et al. (2005) found strong evidence that top management as a respondent is much more willing to engage in real earnings management than accrual earnings management in achieving earnings targets.

This research is important to do for several reasons. First, the Indonesian government has issued Government Regulation Number 47 of 2012 concerning Social and Environmental Responsibility of Limited Liability Companies, as a form of commitment to sustainable development. The regulation states that companies will receive sanctions if they do not carry out TJSI activities. For public companies, this non-compliance has an impact on investor confidence in the company, which is reflected in the reluctance of investors to invest in the company. Therefore, stakeholders are interested in seeing whether ESG compliance as part of corporate social responsibility practices affects company value or not. Second, the implementation of ESG practices requires greater costs, thus hinting at potential problems that may occur such as lower profitability issues (Kuzmina & Lindemane, 2017). This is important to study so that investors consider the possibility of REM practices caused by ESG practices.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Legitimacy theory states that companies cannot be separated from the social context because a company has social contacts with its surroundings (Holder-Webb et al., 2011). This theory also states that companies must consider the rights of the public at large, not only considering the rights of investors. This is in line with stakeholder theory which explains that companies are not only financially responsible to investors, but also non-financially responsible to other stakeholders. The survival of the company depends on the support provided by all stakeholders, depending on how the company manages relationships with customers, employees, investors, suppliers, society, community, etc. Companies that carry out environmental responsibility well are considered to fulfill non-financial obligations. This leads to increased investor confidence in the company.

Increased investor confidence is considered to affect market capitalization. Increasing market capitalization is an achievement for the company, because by increasing market capitalization, the prosperity of owners and shareholders will also increase. An increase in market capitalization can be used as a benchmark for investors in assessing a company. The role of firm value shows how public trust in the company can affect investors' perceptions of investing in the company. According to several studies, maximizing the welfare of stakeholders will increase the value of the company in the long term (Jensen, 2002).

Companies that sell their shares to the public (go public), the value of the company can be reflected in the market price of the shares traded on the stock exchange. An increase in share price is synonymous with an increase in the prosperity of the shareholders. For investors, the company's current and future prospects are illustrated by a good company value. Good company value reacted positively by investors and creditors. Investors will choose to invest in companies with maximum corporate value because they can provide maximum prosperity. As for creditors, a good company value reflects the company's ability to pay debts.

The description above is supported by several empirical studies. These studies include research conducted by [Yoon et al. \(2018\)](#), [Aboud & Diab \(2018\)](#), [Li et al. \(2018\)](#), [Melinda & Wardhani \(2020\)](#), and [Behl et al. \(2022\)](#), who found ESG to have a positive and significant relationship to firm value.

H1: An increase in ESG has an effect on an increase in firm value

Companies that carry out ESG activities must incur costs such as energy consumption reduction costs, rich house gas emission reduction costs, waste reduction costs, research and development (R&D) expenditures related to ESG, costs for social activities, employee welfare costs, and other related costs. Implementation of ESG activities. This can hint at potential problems that might occur, such as the problem of lower profitability ([Kuzmina & Lindemane, 2017](#)).

Lower profitability as a result of implementing ESG-based activities can be a reason for company managers to practice earnings management. This is in line with what was stated by [Bartov & Mohanram \(2004\)](#), namely, one of the reasons managers do earnings management is the desire to remain profitable. This objective relates to the assessment of investors who see company profits as an indicator to assess company performance.

Real earnings management carried out by companies to maintain profits amid spending on ESG-based activities will have an impact on financial reports. The company's financial statements are no longer relevant to users if there are indications of manipulation by management on the financial statements. Users may lose confidence in financial statements due to agency problems.

The loss of stakeholders' trust, especially investors, will have an impact on a decrease in the company's market capitalization. This decrease in market capitalization will cause a decrease in the value of the company. This is because for companies that sell their shares to the public (go public), the value of the company can be reflected in the market price of the shares traded on the stock exchange. An increase in share price is synonymous with an increase in the prosperity of the shareholders. For investors, the company's current and future prospects are illustrated by a good company value. Investors will choose not to invest in companies with a company value that is not optimal because they are considered unable to provide maximum prosperity.

H2: Real earnings management weakens the effect of ESG on firm value

RESEARCH METHODS

Population and Research Sample

The population in this study are all companies listed on the Indonesia Stock Exchange in the 2012-2021 period. This research involved ten years of observation. Observations for these ten years are based on the statement that ESG is a long-term investment that can be made by companies ([OECD, 2021](#)). Therefore, the authors justify that ten years of observations have been able to see the long-term impact of ESG on company value. The sampling technique used in this study was a purposive sampling technique, namely a sampling technique with certain considerations. The criteria for determining the sample are as follows:

1. Companies listed on the Indonesia Stock Exchange in the 2012-2021 period.
2. Listed companies that have ESG scores and financial data contained on Thomson Reuters for the period 2012-2021.

3. Companies that are not engaged in the financial industry (banks, insurance, finance companies, and securities companies).

Data and Data Sources

The type of data used in this research is secondary data. The main secondary data used in this study is ESG score data published by Refinitiv Eikon Thomson Reuters. Sample data of non-financial companies listed on each Stock Exchange in each country in Indonesia were also obtained from Refinitiv Eikon Thomson Reuters.

Variable Operationalization

Dependent Variable

The dependent variable in this study is firm value as measured by Tobin's Q. Tobin's Q has been modified in its use. Tobin's q modification has been used consistently because it's simplified across various game simulations. The formula is as follows:

$$Q = \frac{\text{Market Value of Outstanding Shares} + \text{Total Debt}}{\text{Total Asset}}$$

Independent Variable

The research variable in this study is ESG. The ESG variable is measured by the ESG combination score (ESGC) issued by Refinitiv Eikon Thomson Reuters. ESGC scores provide a thorough and comprehensive assessment of a company's ESG performance. The assessment is based on reported information related to the ESG pillar, with an overlay of the ESG controversy drawn from global media sources. The main purpose of this score is to reduce the ESG performance score based on negative media stories. This is done by including the impact of significant material ESG controversies in the overall ESGC score.

Moderating Variables

Moderating variables are variables that can strengthen or weaken the direct relationship between the independent variables and the dependent variable. The moderating variable in this study is real earning management (REM). The measurement of REM levels in this study follows [Chouaibi & Zouari \(2022\)](#) and [Srivastava \(2019\)](#), which is based on [Roychowdhury \(2006\)](#). Measurement of real earnings management is carried out using three measurements, namely cash flow from operations, production costs, and discretionary costs.

1. Abnormal Discretionary Spending (ADISEXP)

$$\frac{\text{DISEXP}_t}{\text{TA}_{t-1}} = \beta_0 + \beta_1 \left(\frac{1}{\text{TA}_{t-1}} \right) + \beta_2 \left(\frac{S_t}{\text{TA}_{t-1}} \right) + \varepsilon_t \quad (1)$$

2. Abnormal Operating Cash Flow (ACFO)

Calculate the coefficient of the estimated ACFO with the following regression formula.

$$\frac{\text{CFO}_t}{\text{TA}_{t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{\text{TA}_{t-1}} \right) + \alpha_2 \left(\frac{S_t}{\text{TA}_{t-1}} \right) + \alpha_3 \left(\frac{\Delta S_t}{\text{TA}_{t-1}} \right) + \varepsilon_t \quad (2)$$

3. Abnormal Production Costs (APROD)

[Roychowdhury \(2006\)](#) defines production costs as $\text{PRODt} = \text{COGSt} + \Delta \text{INV}$. Calculate the coefficient of the APROD estimate with the following regression formula:

$$\frac{\text{PRODt}}{\text{TA}_{t-1}} = \delta_0 + \beta \delta_1 \left(\frac{1}{\text{TA}_{t-1}} \right) + \delta_2 \left(\frac{S_t}{\text{TA}_{t-1}} \right) + \delta_3 \left(\frac{\Delta S_t}{\text{TA}_{t-1}} \right) + \delta_4 \left(\frac{\Delta S_{t+1}}{\text{TA}_{t-1}} \right) + \varepsilon_t \quad (3)$$

Real earnings management is measured as a whole by adding up ADISEXP, ACFO, and APROD. Real profit management is mathematically measured as follows.

$$REM = -ADISEXP + APROD - ACFO$$

Keterangan :

- $DISEXP_t$: Discretionary spending in fiscal year t
 CFO_t : Operating cash flow in fiscal year t
 $COGS_t$: Cost of goods sold in fiscal year t
 ΔINV : Change in inventory
 $PROD_t$: Cost of production in fiscal year t
 TA_{t-1} : Total assets at the end of fiscal year t-1
 S_t : Sales in fiscal year t
 ΔS_t : Change in sales level between fiscal years t and t-1
 ΔS_{t-1} : Change in sales between t-1 and t-2
 $ACFO$: Abnormal operating cash flow
 $APROD$: Abnormal production costs
 $ADISEXP$: Abnormal discretionary costs
 REM : A composite measure of real earnings management
 ε_t : Error

Control Variables

Pollution Sector

Several studies use dichotomous variables to assess sector participation. This study uses the dummy variable to measure this variable, which gives a value of 1 if the company is in the chemicals, electrical equipment, oil, gas, utilities and fuel oil, metal, and mining sectors, as well as cars and auto components ([Chouaibi & Zouari, 2022](#)). Conversely, sectors other than these sectors will be given a value of 0.

Company Size

[Brigham & Houston \(2010\)](#) defines company size as the size of a company that is shown or assessed by total assets, total sales, total profits, tax expenses, and others. The company itself is categorized into two types, namely small-scale companies and large-scale companies. The level of investor confidence can be measured by company size. The bigger the company, the more it is known by the public. Company size is calculated by the log of total assets. Systematically, company size is measured by:

$$\text{Firm Size} = \ln(\text{Total Asset})$$

Return on Asset (ROA)

Return on assets is a profitability measurement ratio that is often used by financial managers to measure overall effectiveness in generating profits with available assets. ROA is used as a measure of management performance by looking at how management can utilize assets to become profits for the company. The approach to calculating ROA in this study is calculated by the following formula.

$$ROA = \frac{\text{Net Income Before Tax}}{\text{Total Asset}}$$

Data Analysis Method

This study uses panel data regression to test the hypotheses that have been formulated. Panel data analysis in this study was carried out using STATA version 14 software tools. The panel regression model in this study was:

Equation (4) presents the regression model used to test the H2 hypothesis, which shows the effect of moderating variables on the effect of the independent variables on the dependent variable.

$$Q_{i,t} = \beta_1 + \beta_2 ESGC_{i,t} + \beta_3 ESGC * REM + \beta_4 POL_{i,t} + \beta_5 SZ_{i,t} + \beta_6 ROA_{i,t} + \epsilon \dots\dots\dots (4)$$

Information:

- ESGC : ESG Combined Score
- REM : Real Earning Management
- POL : The polluting sector
- SZ : Firm Size
- ROA : Return on Asset

Hypothesis testing

This study uses the t-test to see how each independent variable influences the independent variable. Decision-making on test results is done by looking at the significance value of the coefficients β_2 and β_3 . If the significance value of the t-test <0.05 , it can be interpreted that there is an influence between the independent variables on the dependent variable.

RESULTS AND DISCUSSION

Description of Research Object

The research objects in this study are non-financial companies listed on the Indonesia Stock Exchange for the 2012-2020 period. The detailed results of the research samples obtained can be seen in Table 1.

Table 1. Research Sample

No	Criteria	Total Sample
1.	Companies listed on the Indonesia Stock Exchange in the 2012-2021 period.	833
2.	Listed companies that have ESG scores and financial data contained on Thomson Reuters for the period 2012-2021.	(357)
3.	Companies engaged in the financial industry (banks, insurance, finance companies, and securities companies).	(454)
	Total samples that meet the criteria	22
	Research year	10
	Number of company-year data	210
	The final sample of the study	176

Descriptive Statistical Analysis

Descriptive analysis is used to describe the variables in this study to determine the distribution of data such as range, maximum, minimum, mean, and standard deviation of the variables contained in this study. The results of descriptive statistics for this study are presented in Table 2 as follows.

Table 2. Descriptive Statistical Analysis

	N	Maximum	Minimum	Mean	Std. Deviation
Tobin's Q	176	1.659799	0.027249	0.427436	0.325798
ESG	176	89.6441	8.162385	48.59957	21.5898
REM	176	2.119178	-2.88079	0.312036	0.71999
ESG*REM	176	87.74146	-117.997	16.18427	23.03963
Sector	176	1	0	0	0.499256
Size	176	26.62947	22.91614	24.47447	0.831956
ROA	176	0.660815	-0.02741	0.188236	0.114276
Valid N (listwise)	176				

Based on Table 2, the number of valid data processed (N) is 176 company data. The minimum value of 0.027249 is less than one, which indicates that the company is classified as undervalued because the book value is higher than the market value. Conversely, the maximum value is 1.659799, which is greater than one, indicating that the company is classified as expensive (overvalued). Tobin's Q in this study has an average value of 0.427436 at a standard deviation of 0.325798.

Table 2 also presents the results of the descriptive analysis of the ESG variable as an independent variable. The lowest ESG score is 8.162385, where the range is included in the first quarter (score 0 – 25), which means that the performance of ESG is relatively poor and the level of transparency is inadequate in reporting material ESG data to the public. The maximum value is 89.6441, where the range is included in the first quarter (score 0 – 25), which means that the ESG performance is relatively very good, and the level of transparency is high in reporting material ESG data to the public. The ESG score in this study has an average value of 48.59957 at a standard deviation of 8.162385.

The results of the descriptive analysis in Table 2 show that the REM variable has the lowest value of -2.88079. Meanwhile, the highest value of REM is 2.119178. In addition, the average value of REM is 0.312036. This negative value indicates that real earnings management that occurs within the company results in a low-profit target (income-decreasing) (Suri et al., 2023).

This study uses three control variables. The first control variable in this study is the pollution sector. The pollution sector variable has a minimum value of 0 which is spread over 98 research data, and a maximum value of 1, which is spread over 78 research data. The pollution sector variable has a standard deviation value of 0.49. The next control variable is company size as measured by the natural logarithm of the company's total assets. The minimum value of company size in this study is 22.91, and the maximum value of the company size variable is 26.62 owned by the company. This variable has an average value of 24.47 and a standard deviation value of 0.83. The final control variable used in this study is ROA, with a minimum value of -0.02. The maximum value of 0.66 indicates that the company is more efficient in using the company's assets to generate a larger net profit so that the

company's position will be assessed as getting better. The ROA variable has an average value of 0.18 and a standard deviation value of 0.11.

Interpretation of Results and Discussion

This study has two hypotheses that are tested using panel data regression. Based on hypothesis testing using panel data regression analysis, the following results are obtained.

Source	SS	df	MS	Number of obs	=	176
Model	.413214582	6	.068869097	F(6, 169)	=	3.24
Residual	3.5882369	169	.021232171	Prob > F	=	0.0048
				R-squared	=	0.1033
				Adj R-squared	=	0.0714
Total	4.00145148	175	.022865437	Root MSE	=	.14571

Y_tr	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
X	.0013529	.0007731	1.75	0.082	-.0001733 .0028792
C1	-.0109442	.0261386	-0.42	0.676	-.0625444 .0406561
C2	-.0584066	.0303432	-1.92	0.056	-.118307 .0014939
C3	-.01688	.0142732	-1.18	0.239	-.0450568 .0112967
C4	-.4583302	.1194041	-3.84	0.000	-.6940459 -.2226144
M	-.0004746	.0009653	-0.49	0.624	-.0023802 .001431
_cons	.809155	.3563831	2.27	0.024	.105619 1.512691

This study involved 176 out of a total of 210 research data. A total of 44 data were excluded from the observation because these data were outlier data. The results of the F statistical test indicated that this model was quite good because it had a calculated F value of 3.24 with a significance value of 0.0048. Furthermore, the test results show that this study has an R-square value of 0.1033 or 10.33%.

The Effect of ESG on Firm Value

This hypothesis is tested to see whether ESG has an impact on firm value in non-financial companies in Indonesia. The p-value of 0.082, which is less than 0.10, indicates that the first hypothesis is accepted. The conclusion is that ESG has a positive and significant effect on firm value.

The results of these statistical tests are in line with the stakeholder theory, which states that companies in carrying out their business activities, not only for the benefit of the company but also must be responsible to the company's stakeholders (such as creditors, government, consumers, suppliers, and the community). The survival of the company depends on the support provided by all stakeholders. Stakeholder expectations will be fulfilled if there is sustainability management within the company. Sustainability management activities are an effective stakeholder communication tool that implies a positive relationship between stakeholder power, sustainable achievement, and sustainability reporting.

These results are also in line with legitimacy theory which states that companies cannot be separated from the social context because a company has social contact with the surrounding environment. [Holder-Webb et al. \(2011\)](#). Based on this theory, management can influence the general public's perception of the company. One way to apply legitimacy by companies is to carry out ESG performance properly and present ESG-related information. This is in line with the findings by [Widiastuty & Soewarno \(2019\)](#) that companies in Indonesia spend CSR for charity.

The results of this study are in line with those found by [Li et al. \(2018\)](#), who found that ESG disclosure can increase transparency and accountability, which can increase stakeholder trust and play a role in increasing company value. This means that if the company consistently implements ESG every year, then the sustainability of the company will be trusted by stakeholders, which will indirectly increase the value of the company. Previous research conducted by [Melinda & Wardhani \(2020\)](#) shows that ESG performance has a positive effect on firm value. According to [Fatemi et al. \(2018\)](#) found that ESG strengths increase firm value, and ESG weaknesses reduce firm value. [About & Diab \(2018\)](#) state that companies with high ESG performance values have higher corporate values when compared to companies with low ESG performance values.

Effect of REM on the Relationship between ESG and Corporate Value

The test results show that the significance value of the REM variable is 0.000, which is smaller than 0.05 ($0.000 < 0.05$) with a t count of -3.84. This value indicates that statistically, the real earnings management variable has an influence on firm value. However, the statistical value of the ESG and REM interaction variables on the test results shows a significance value of 0.624. This value is greater than 0.05 ($0.624 > 0.05$), which means that the moderating variable does not play a role in the effect of ESG on firm value. [Solimun \(2011\)](#) states that the moderating variable is referred to as the moderating predictor variable, namely the independent variable that influences the relationship between the independent variable and the dependent variable through the moderating variable. The moderating predictor variable occurs if the coefficient b2 (the moderating variable acts as the independent variable) is declared significant and the coefficient b3 (the interaction variable between the independent variable and the moderating variable) is not statistically significant. Because the interaction variables REM and ESG have no significant effect, hypothesis 2 analysis to see the moderating effect of REM is not carried out, but an analysis of the role of REM as an independent variable will be carried out. In other words, it can be concluded that hypothesis 2, which states that REM weakens the effect of ESG on firm value, is **rejected**.

Real earnings management (REM) is a concept that refers to the actions of managers changing the timing or arrangement of operations, investments, and/or financing transactions to manipulate reported earnings. REM is related to agency theory because agency theory explains the behavior of various parties involved in corporate funding decisions and analyzes the effect of this behavior on capital structure. This theory starts from the assumption that there are different interests between managers/shareholders and between creditors/managers and shareholders. Based on agency theory, REM's opportunistic view suggests that managers carry out normal business activities but with a desire to provide false information to users of financial statements. In particular, managers deliberately deviate from normal activities aimed at achieving financial reporting objectives for personal gain ([Roychowdhury, 2006](#)).

The use of opportunistic activities, such as overproduction, and discretionary costs, such as R&D spending, can increase information risk because these opportunistic actions disguise true economic performance. Therefore, REM creates information asymmetry and triggers agency friction in the form of adverse selection and moral hazard problems. Adverse selection increases when managers have access to correct information about firm value while investors do not. REM-induced information asymmetry creates an adverse selection

problem between managers and providers of capital, thereby undermining the efficient allocation of resources for investors. A moral hazard arises when the principal is unable to monitor agent behavior and fails to assess whether the agent is acting to maximize firm value. Therefore, managers can take advantage of the moral hazard situation caused by this information asymmetry and can use REM to achieve earnings benchmarks for personal gain ([Roychowdhury, 2006](#)).

One of the companies conducting REM practices is to meet analyst expectations. However, [Cupertino et al. \(2016\)](#) found that companies that use REM to exceed analyst expectations will have lower investment and equity market performance in the following year compared to companies that fall below analyst expectations without earnings management. This is in line with what was conveyed by ([Roychowdhury, 2006](#)), which states that REM's opportunistic actions have a negative effect on firm value. In the short term, opportunistic REM can increase current income, but in the long term, there will be consequences in the future in the form of higher inventory costs from excess production activities and opportunity lost from research and development cost-cutting activities. Reduced future sales and higher costs lead to lower future profitability. In this case, shareholders value the company at a lower value because there is a negative future prospect for contributing to shareholder wealth, such as future earnings or dividends for shareholders. This leads to a lower share price.

This finding is in line with previous research conducted by [Darmawan et al. \(2019\)](#), who found that real earnings management is considered very dangerous by the market because it will have a negative impact on the company's cash flows in the future so that companies that are detected as carrying out real earnings management will receive a negative response from the market. Furthermore, it is also supported by research conducted by [Simamora et al. \(2022\)](#), who found that REM has a negative effect on firm value, indicating that REM reduces economic value. In line with what was found by [Nadifah et al. \(2020\)](#), which states that if a company does not have transparency or openness in disclosing information about company activities, then it will tend to carry out various forms of earnings management for both personal and corporate interests.

CONCLUSION

This study aims to provide empirical evidence on how ESG influences firm value by focusing on the role of real earnings management as a moderating variable. The results of statistical testing show that ESG affects company value. This indicates that investors and companies have made ESG a relevant value and one of the considerations in making decisions and making policies related to company value. The results of this study support the findings of previous literature, which empirically found that ESG practices can increase firm value because investors have assumed that ESG is a relevant value in decision-making. In addition, statistical results also show that REM is not proven to weaken the effect of ESG on firm value. However, statistical results also show that REM is not proven to have a moderating effect on the effect of ESG on firm value. However, these results prove that an increase in REM has an effect on a decrease in firm value. This happens because REM practices carried out by companies can be detected by investors, thereby reducing investor confidence to invest in the company. The results of this study support the findings of previous literature, which empirically found that REM practices carried out by companies would reduce firm value if detected by investors.

This research has several limitations. First, this study only uses ESG data provided by Thomson Reuters with minimal data completeness, so it does not adequately cover the required data requirements. Second, this research only focuses on the non-financial sector. Based on these limitations, the researcher recommends that future researchers use ESG data provided by other data providers so that it can be used as a comparison and to complete data gaps, as happened in this study. In addition, future researchers can analyze how the influence of ESG and the role of REM on firm value in financial companies.

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