

# THE MODERATING EFFECT OF AUDIT QUALITY ON THE RELATIONSHIP BETWEEN EARNINGS MANAGEMENT AND SUSTAINABLE INVESTMENT OPPORTUNITIES: EVIDENCE FROM TELECOMMUNICATION AND ENERGY COMPANIES IN INDONESIA

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# ABSTRACT

This research investigates the relationship between earnings management and audit quality on sustainable investment opportunities in Indonesia, namely in the telecommunications and energy industries. This research comprises 288 firms' data and year-by-year observations from 2015 to 2022. The Panel Data Ordinary Least Square method is used to investigate the correlation and the multiple regression analysis is used to investigate the moderating impact of audit quality on the earnings management and sustainable investment opportunities relationship. The sampling technique used in this study was purposive sampling. The findings of this research show that earnings management has a significant negative effect on sustainable investment opportunities. Furthermore, there is no relationship between audit quality and sustainable investment opportunities. In addition, the moderation analysis shows that audit quality moderates the relationship between earnings management and sustainable investment opportunities.

Keywords: Audit Quality, Earnings Management, Sustainable Investment Opportunities.

# **INTRODUCTION**

Companies consistently aim to optimize their performance to ensure their continued presence and success in the competitive business landscape. The significance of maintaining trust among stakeholders cannot be overstated, as companies that have earned the trust of stakeholders are better positioned for success and resilience in the face of business competition (Devita & Arviana, 2023). The culmination of financial accounting efforts is the presentation of financial statements, serving as the ultimate product. In financial accounting, a critical aspect lies in the assessment and measurement of the company's financial statements not only provide a snapshot of the company's current standing but also contribute significantly to the establishment and reinforcement of stakeholder trust, playing a pivotal role in the overall sustainability and prosperity of the business (Moridu, 2023).

Accounting standards play a crucial role in emphasizing the importance of disclosure in financial reporting, with the aim of enabling all stakeholders to make well-informed decisions based on the provided information. However, this noble objective can face challenges due to conflicts of interest, particularly when it comes to management, which serves as the primary source of information for a company. The potential for information asymmetry arises as management possesses more comprehensive insights into the company's current and actual value compared to other investors and parties (Khatali, 2020). This information asymmetry issue is further exacerbated by inequalities in the

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quality and quantity of information obtained by different parties. The result is a scenario where incomplete disclosure negatively impacts the quality of earnings, leading to uninformed decisions by those lacking access to complete information. Addressing these challenges becomes crucial for maintaining the integrity and effectiveness of financial reporting systems (Yulianto et al., 2023).

In the realm of agency theory, the issue of information asymmetry between managers and senior shareholders stands out as a fundamental challenge impacting the disclosure of accounting information. The essence of this problem lies in the unequal distribution of information, where certain parties have access to data that remains elusive to others. This information asymmetry can instill skepticism among investors who lack complete insights, raising concerns about the transparency and reliability of financial information. As a consequence, the trustworthiness and faithful representation of the company's financial data are compromised, exerting a significant influence on the overall performance and potentially leading to concerns about earnings management. It becomes imperative for companies to address these information disparities to uphold transparency and foster confidence among stakeholders in the financial reporting process (Xie et al., 2020).

The exploration of earnings management within research gained momentum with the introduction of the concept of separating principals (owners) from agents (managers), leading to the emergence of agency problems (Indrawati & Surjandari, 2022). In this context, managers resort to manipulating financial data to portray a financial position that maximizes their personal benefits, often disregarding the actual position or real performance of the company. This manipulation serves the purpose of either misleading stakeholders about the true economic performance of the firm or influencing contractual outcomes dependent on reported accounting figures. Earnings management manifests in various forms, including inflating sales figures, reducing overall expenditures through overproductions, boosting reported revenues, and minimizing discretionary expenses. Recognizing and understanding these diverse tactics is essential for regulators and stakeholders to maintain the integrity of financial reporting and ensure accurate assessments of a company's economic performance.

Research conducted by (Ramadan et al., 2021) found that audit quality has a negative impact on the relationship between information asymmetry and earnings management. This implies that audit quality can decrease the level of information asymmetry and reduce earnings management. Dwianika (2019) the findings of this study suggest that both tax planning and leverage have an impact on earnings management. Audit quality, when included as a moderating variable, enhances the correlation between tax planning and leverage in influencing earnings management.

Oroud et al (2023) found that audit quality works as a moderator in the relationship between financial performance and stock return. Auditor fees have a significant impact on the connection between company stock returns, EPS, BV, DPS, and cash flows. The size of the auditing firm impacts the relationship between corporate stock returns and profits per share, dividends per share, and the CFO, but not book value.

According to (Priyanto & Aryati, 2023), the study's findings indicate that actions taken to manage earnings will have a positive effect on the company's value, which is reflected in the stock price. As a result, when the manager's goals diverge from those of the capital owner, the management will act unethically and commit accounting fraud, which will harm the owner of the capital.

Hansen (2021) the findings show that audit quality and earnings management do not negatively correlate, which is contrary to the previous research. This may indicate the need for more study, such as a bigger sample size or the use of models other than the Modified Jones model to assess earnings management.



Sector that can serve as a potential investment opportunity is a company that operates in the telecommunications industry. The need for information among the general public is growing from one year to the next, and one of the most common ways that people access this information is through the usage of telecommunications services. Moreover, the energy sector also plays a crucial role in the economy, society, politics, and the development of a nation. The demand for energy continues to rise, reflecting the increasing global need for energy. In this era of globalization, energy provision supports the livelihood of the international community and aids in the development of countries, such as enhancing industrial growth, improving efficient transportation, and providing other human services. Because of this, enterprises that deal in telecommunications and energy make a substantial contribution to the expansion of the national economy.

Based on the study gap and phenomena mentioned above, this research is entitled "The Moderating Effect of Audit Quality on the Relationship Between Earning Management and Sustainable Investment Opportunities: Evidence from Telecommunication and Energy Companies in Indonesia".

# THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

This part talks about the research theory, the structure that shows how the research factors are related, and how research predictions were made.

#### **Agency Theory**

Agency theory is a key concept that investigates the connection between principals and agents in which the principle delegated power to the agent to act on their behalf (Hendrastuti & Harahap, 2023). These choices involve resource allocation within the company, coordination across subunits, pricing, costing, compensation, and incentives. The principle-agent relationship is the basis of agency theory. It is defined by a contract in which the principal engages the agent to provide a service or make choices (Jensen & Meckling, 1976).

One of the fundamental difficulties in agency theory is information asymmetry, which occurs when the agent has more knowledge about their actions and choices than the principal (Hendrastuti & Harahap, 2023). This imbalance might cause issues such as moral hazard and adverse selection. The principle-agent dilemma occurs when the interests of the principal and the agent differ, resulting in conflicts and inefficiencies. Agents may behave in their own self-interest rather than in the best interests of the principals, resulting in agency expenses such as residual loss, monitoring and bonding costs (Jensen & Meckling, 1976).

Agency theory emphasizes the necessity of audit quality in minimizing conflicts of interest between principals and agents. High-quality audits constrain earnings management by ensuring the accuracy and reliability of financial statements (Moridu, 2023). This, in turn, enhances investment opportunities by reducing information asymmetry and increasing investor confidence.

# **Theoretical Framework**

The theoretical framework illustrates the relationships between the research variables in the form of a diagram. This study uses dependent variables, independent variables, and control variables. The purpose of this research is to determine the influence of an independent variable on the dependent variable. Sustainable investment opportunities is the dependent variable and this research also use earnings management as an independent variable. The H1 highlights the link between EM and sustainable investment opportunities. The second hypothesis outlines the link between audit quality and sustainable investment opportunities. Audit quality is utilized as a moderator variable to

examine if external attribution strengthened or weakened the relationship between independent and dependent variables. The straight line indicates that the moderating variable has a direct moderating effect on the link between EM and sustainable investment opportunities.



# **Figure 1 Theoretical Framework**

# **Hypothesis Development**

# The Effect of Earnings management on Sustainable Investment Opportunities

Earnings management undermines transparency in financial reporting, making it challenging for sustainable investors to accurately assess a company's true financial health and performance. Investors who prioritize sustainability rely on transparent and accurate information. When earnings are manipulated, it erodes trust and credibility, potentially leading sustainable investors to avoid companies with questionable accounting practices (Ehsan et al., 2022).

According to Jensen & Meckling (1976), which explains the behavior of managers (agents) who may act in their own interests rather than those of the shareholders (principals). This divergence of interests can lead to earnings management, where managers manipulate financial reports to present a more favorable view of the company's performance. This manipulation can mislead investors, resulting in suboptimal investment decisions (McNichols & Stubben, 2018).

Research by (Bzeouich et al., 2019) found that investment efficiency is negatively correlated with earnings management. First, earnings management methods are seen as management's attempt to acquire the confidence of stakeholders, notably shareholders, in order to match their interests with the company's goal of delivering welfare to those stakeholders. When a corporation works to meet the needs of its shareholders by providing them with benefits, it aims to achieve outstanding performance that catches shareholders' attention and serves their interests. Second, earnings management strategies are perceived as management's effort to obscure critical information that is critical to stakeholders by



using acknowledged methods to improve the equality of accessible information, which may not be the case. So the hypothesis is:

H1: Earning Management has a negative effect on Sustainable Investment Opportunities.

# The Effect of Audit Quality on Sustainable Investment Opportunities

The reliability and credibility of financial statements are significantly influenced by audit quality, which in turn significantly impacts sustainable investment opportunities. According to Chinhayu & Saiful (2022), the audit quality is positive effect on investment efficiency, it means that audit quality can influence investment decisions by providing more accurate and reliable information to investors. Research by Siala & Jarboui (2019) support these findings by showing that quality auditors can minimize a company's opportunities to falsify financial data, which is important for attracting sustainability-focused investors.

The role of audit quality in enhancing investment opportunities can be further understood through the lens of agency theory. High-quality audits reduce the information asymmetry between managers and shareholders by ensuring that financial statements are accurate and free from material misstatements (Piot, 2010). This increased transparency and reliability of financial information can boost investor confidence, leading to more investment opportunities (Moridu, 2023).

In essence, the confluence of AQ and sustainable investment opportunities underscores the imperative of aligning financial rigor with sustainability imperatives. So the hypothesis is:

H2: Audit quality has a positive influence on sustainable investment opportunities.

# Audit Quality Moderates the Influence of Earnings Management on Sustainable Investment Opportunities

Auditing is a critical part of agency relationship monitoring, owing to the knowledge asymmetry and possible conflict of interest between shareholders and management (Oroud et al., 2019). Earnings management undermines transparency in financial reporting, making it challenging for sustainable investors to accurately assess a company's true financial health and performance. Investors who prioritize sustainability rely on transparent and accurate information.

Earnings management distorts risk assessment. Investment opportunities is depicts the growth opportunities for a company. However, when earnings are artificially inflated or manipulated, it becomes difficult to gauge the true financial risks associated with a company's operations. This lack of transparency can lead to misinformed investment decisions, as sustainable investors may overlook companies with hidden financial vulnerabilities. Furthermore, earnings management can hinder long-term value creation, a key focus for sustainable investors. Companies engaged in earnings management often prioritize short-term gains at the expense of long-term sustainability initiatives. This shortsighted approach can deter sustainable investors who seek companies committed to responsible financial management and sustainable business practices that create enduring value (Abdeljawad et al., 2020).

Alsmady's (2023) research illustrates the quality of earnings management and auditing in the context of sustainable investment opportunities in the GCC. The data set of the analysis consists of 1337 observations from company years 2011 to 2017. Furthermore, the study examines the moderating impact of AQ on the relationship between sustainable investment opportunities and earnings management. The results suggest a robust negative correlation between sustainable investment opportunities and earnings management. Furthermore, the empirical evidence demonstrated a substantial positive correlation between sustainable investment opportunities and audit quality. Additionally, the negative



impact of earning management is modified by audit quality, which implies that audit quality is essential for reducing information asymmetry and mitigating the agency theory issue. Based on these results, it's clear that big audit firms play an important role in management's governance and help make accounting information more credible for investors. So the hypothesis is:

H3: Audit Quality can moderate the influence of Earning Management on Sustainable Investment Opportunities.

# **RESEARCH METHODOLOGY**

This section provides an explanation of the study population and sample, the variables used and their measurements, as well as the research model.

# **Population and Sample**

The population of this research is 880 telecommunications and energy companies listed on the Indonesia Stock Exchange. The population figures came from the yearly reports of businesses from 2015 to 2022. This research used purposive sampling technique. The following are the criteria that must be fulfilled for this research:

- 1. Telecommunication and energy sectors that listed on IDX.
- 2. The financial statements have been reported and audited.
- 3. The company's financial statements have complete information about dependent and independent variables.

# **Data Analysis Method**

According to Imam Ghozali (2018), the purpose of this test is to determine if a moderating variable strengthens or weakens the relationship between dependent and independent variables. The MRA test will be utilized in this study. This research will make use of the MRA test. MRA employs an analytical methodology that safeguards the integrity of the sample while also establishing a basis for managing the impact of the moderating variable. This strategy involves introducing a multiplication variable between the independent and moderating variables:

$$SIO = \alpha + \beta_1 EM + \beta_2 AQ + \beta_3 FS + \beta_4 ROA + \beta_5 LEV + \beta_6 TATO + \beta_7 EM. AQ + \varepsilon$$

SIO	= Sustainable Investment Opportunities.
α	= Constant
β1-β7	= Regression Coefficient
EM	= Earnings management
AQ	= Audit quality
FS	= Firm size
ROA	= Return on asset
LEV	= Leverage
TATO	= Total Asset Turnover
EM*AQ	= Interaction earning management & audit quality

Variable and Measurement						
Variable	Symbol	Measurement				
Dependent Variable						
Sustainable Investment Opportunities	SIO	(Total assets +(Number of Outstanding shares × Price per share)-Book value of equity)/(Total assets)				
Independent Variable						
Earnings Management	EM	It is measured using the discretionary accruals by Jones Model.				

Table 1				
Variable and Measuremen				



Moderating Variable Audit Quality Control Variable	AQ	Companies that employ KAP services associated with the "Big Four" KAPs get one (1), while those that use KAP services linked with non-Big Four KAPs receive zero (0).
Firm Size Leverage	FS	Natural logarithm of total assets.
Return on Assets	LEV	Total liabilities/ total shareholders' equity
Total Assets Turnover	ROA	Net income/total assets
	TATO	Net sales/ total assets

# FINDING AND ANALYSIS

The research results and discussion section contains an explanation of sample selection and findings which include descriptive statistical analysis, normality tests, quantitative descriptive results, and Panel Data Ordinary Least Squares.

# **Description of Research Object**

In this research, the relationship between sustainable investment opportunities and earnings management moderated by audit quality will be tested. The data used is secondary data in form of panel data spanning eight years from 2015-2022. The data is obtained from Bloomberg and website of the company. Additionally, the sector used are telecommunication and energy companies that listed on IDX. Companies that do not meet the criteria will be eliminated through purposive sampling to determine the sample. Here's the sample can be selected:

	Sample Selection Procedure				
No	Criteria	Total			
1	Telecommunication and energy sectors that	110			
	listed on IDX				
2	The financial statements have not been reported	(35)			
	and audited.				
3	The company's financial statements have not	(39)			
	completed information about dependent and				
	independent variables.				
	Total firm sample36				
	Total observations in 2015-2022 (36x8)	288			

Table 2Sample Selection Procedure

The Table 2 represents the selected sample using the purposive sampling technique. Based on the table above, there are 36 companies listed on the IDX that meet the criteria for this study. Subsequently, some companies have not completed information about dependent and independent variables in accordance with research criteria around 35, and the information about the variable has not been completed around 39. Thus, the total number of observations that the author made was 288 during the 2015–2022 period.



#### **Descriptive Statistics**

# Table 3

# **Descriptive Statistics**

	SIO	EM	FS	LEV	ROA	TATO	AQ
Mean	1.435	0.005	31.014	4.620	0.005	0.278	0.635
Median	1.231	0.022	31.19	2.157	0.006	0.225	1.000
Maximum	2.904	0.307	33.25	149.86	0.138	0.647	1.000
Minimum	0.592	0.318	27.87	34.930	0.497	0.028	0.000
Std. Dev.	0.556	0.167	1.256	20.135	0.101	0.178	0.482
Skewness	0.868	0.172	0.5802	6.416	2.270	0.573	0.562
Kurtosis	2.934	2.127	3.241	47.59	11.025	2.102	1.316
Jarque-Bera	36.246	10.554	16.861	25842.4	1020.3	25.465	49.203
Probability	0.0000	0.0051	0.0002	0.0000	0.0000	0.0000	0.0000
Sum	413.29	1.5918	8932.2	1330.8	1.7143	80.331	183.00
Sum Sq. Dev.	88.94	8.08	453.15	116364.3	2.98	9.13	66.71
Observations	288	288	288	288	288	288	288
rce: Eviews 12	Output						

Sustainable investment opportunities as a dependent variable have a minimum value of around 0.592508 and a maximum value of around 2.904371. According to the table, the standard deviation is 0.556694 and the mean is 1.435067, which is the standard deviation less than the mean. Thus, this represents that the spread in the data is relatively small.

The minimum value for earnings management is -0.318212, and the highest value is 0.307020. Furthermore, the value of the mean is 0.005527 and the standard deviation is 0.167823, which means the mean is less than the standard deviation. This indicates that the data has a very large variation or is widely spread out.

Firm size as an independent variable has a minimum value of around 27.87090 and a maximum value of around 33.25570. According to the table, the standard deviation is 1.256564 and the mean is 31.01488, indicating that the standard deviation is less than the mean. Overall, this means that the data has relatively low variability compared to the mean.

The minimum value for leverage is -34.93003, and the maximum value is 149.8697. In addition, the standard deviation is 20.13580, and the mean is 4.620897, indicating that the mean is less than the standard deviation. The mean is less than the standard deviation, suggesting that the data shows significant variability or a broad variation.

The ROA has a minimum value of -0.497740 and a maximum value of 0.138136. Furthermore, the mean value is -0.005953, and the standard deviation is 0.101947. There is a large variation because the mean is less than the standard deviation.

Total Asset Turnover is an independent variable with a minimum value of around 0.028564 and a maximum value of around 0.647694. According to the table, the standard deviation is 0.178408 and the mean is 0.278928, which is the standard deviation less than



the mean. Thus, this represents that the spread in the data is relatively small so that the data is classified as good data.

As a moderating variable, audit quality has a minimum value of around 0.000000 and a high value of about 1.000000. According to the table, the standard deviation is 0.482151 and the mean is 0.635417, which is the standard deviation less than mean. So, the variation of the data from the mean is not very large.

# Chow Test

#### Tabel 4 Chow Test

Tests are required to identify the appropriate panel data regression model in order to obtain accurate prediction results. If the probability is less than 0.05, it means that the selected model is fem. Conversely, if the probability is greater than 0.05, it means that the selected model is CEM.

Effects Test	Statistic d.f.	Prob.
Cross-section F	15.837459 (35,246)	0.0000
Cross-section Chi-square	339.74465135	0.0000

# Source: Eviews 12 Output

Based on testing findings, the probability is 0.0000, which less than 0.05. So that FEM is selected in the Chow test. Hausman test still needs to be tested because to retest compare the FEM and CEM.

# Hausman Test

In Hausman test, need to comparing between Random Effect Model and Fixed Effect Model. If the probability is more than 0.05, it means that the selected model is REM. On the other hand, if the probability is less than 0.05, it means that the selected model is Fixed Effect Model.

# Table 5 Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	384.040210	6	0.0000

# Source: Eviews 12 Output

Based on the table above, the probability is 0.0000. Because the probability is less than 0.05, it means that the selected model is Fixed Effect Model. After doing the Chow test and Hausman test, the result of both tests is Fixed Effect Model.



# **Normality Test**



Source: Eviews 12 Output

Based on chart above, the probability is greater than 5%, it means that the distribution is normal. The probability value for JB is 0.138469, it is greater than 5%. Thus, the regression model fulfills the normality assumption.

# **Multicollinearity Test**

Table 7Multicollinearity Test						
	EM	FS	LEV	ROA	TATO	AQ
X1	1.000000	0.450842	-0.067089	0.680972	0.395387	0.296506
X2	0.450842	1.000000	-0.169464	0.518855	0.787878	0.348391
X3	-0.067089	-0.169464	1.000000	-0.292860	-0.173148	-0.223143
X4	0.680972	0.518855	-0.292860	1.000000	0.435896	0.448882
X5	0.395387	0.787878	-0.173148	0.435896	1.000000	0.589293
Ζ	0.296506	0.348391	-0.223143	0.448882	0.589293	1.000000
Sou	rce: Eviews	12 Output	t			

All of the variables in the table above have a correlation value of less than 0.80 with the variables that are not related to each other. Based on the criteria given, this shows that there is no multicollinearity, which means that there is no correlation between the independent variables.

# **Heteroscedasticity Test**

# Table 8Heteroscedasticity TestHeteroskedasticity Test: Breusch-Pagan-GodfreyNull hypothesis: Homoskedasticity

F-statistic	0.839307	Prob. F(6,281)	0.5404
Obs*R-squared	5.070424	Prob. Chi-Square(6)	0.5348
Scaled explained SS	2.337280	Prob. Chi-Square(6)	0.8862

Source: Eviews 12 Output



The probability must more than 0.05. The table reveals an Obs\*R-squared probability value of 0.5348, indicating that the data does not show signs of heteroscedasticity and that the heteroscedasticity test assumptions have been satisfied, indicating a successful outcome.

# **Autocorrelation Test**

# **Autocorrelation Test**

Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.823515	Prob. F(2,279)	0.4400
Obs*R-squared	1.690182	Prob. Chi-Square(2)	0.4295

# Source: Eviews 12 Output

If the probability value exceeds 0.05, we can conclude that the autocorrelation test assumption has been satisfied. The data has passed the autocorrelation test. The number of probability Obs\*R-squared is 0.4295, according to the table above. More than 0.05 is the probability value of Obs\*R-squared. then it can be concluded that the data has passed the autocorrelation test.

# Hypothesis Testing Simultan Test

Table 10   Simultan Test					
Root MSE	0.212334	R-squared	0.854012		
Mean dependent var	1.435067	Adjusted R-squared	0.829681		
S.D. dependent var	0.556694	S.E. of regression	0.229746		
Akaike info criterion	0.030355	Sum squared resid	12.98470		
Schwarz criterion	0.564537	Log likelihood	37.62883		
Hannan-Quinn criter.	0.244423	F-statistic	35.09934		
Durbin-Watson stat	1.196127	Prob(F-statistic)	0.000000		

Source: Eviews 12 Ouput

Based on the figure above, the calculated F value is 35.09934, while the significance value is 0.000 (<0.05). So, it can be concluded that earnings management, firm size, leverage return on assets, total asset turnover as independent variables are able to simultaneously influence the dependent variable, indicating that the regression model is appropriate for use.



# The Coefficient of Determination Test

Root MSE	0.212334	R-squared	0.854012
Mean dependent var	1.435067	Adjusted R-squared	0.829681
S.D. dependent var	0.556694	S.E. of regression	0.229746
Akaike info criterion	0.030355	Sum squared resid	12.98470
Schwarz criterion	0.564537	Log likelihood	37.62883
Hannan-Quinn criter.	0.244423	F-statistic	35.09934
Durbin-Watson stat	1.196127	Prob(F-statistic)	0.000000

Table 11The Coefficient of Determination Test

Source: Eviews 12 Ouput

As presented in the table, the amount of Adjusted R Square 0.829681 can be interpreted that the independent variables of earnings management, firm size, leverage, ROA, Tato, audit quality have an effect of 82.96% on dependent variable. In addition, 17.04% is influenced by other variables that were not used in this study.

Table 12

#### **Regression Results**

]	Regression Results					
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	5.774711	0.941337	6.134581	0.0000		
EM	-0.765022	0.284553	-2.688501	0.0077		
FS	-0.160236	0.029593	-5.414645	0.0000		
LEV	0.002186	0.000760	2.876025	0.0044		
ROA	0.673435	0.251736	2.675163	0.0080		
TATO	2.212767	0.380347	5.817754	0.0000		
AQ	0.017282	0.251018	0.068846	0.9452		

Source: Eviews 12 Ouput

Earnings management has a significantly negative impact on sustainable investment opportunities, which means the hypothesis is accepted. The number of t-statistics is -2.688501 and probability is 0.0077, which the probability is less than 0.05. For the coefficient around -0.765022, it is negative. So, if the earnings management is decreasing, the sustainable investment opportunities is increasing.

Firm size also has a significantly negative effect on sustainable investment opportunities. The number of t-statistics is -5.414645 and probability is 0.0000, which is less than 0.05. For the coefficient around -0.160236, it is negative. So, if the firm size is increasing, the sustainable investment opportunities is decreasing.

Leverage has a significantly positive impact on sustainable investment opportunities. The number of t-statistics is 2.876025 and probability is 0.0044, which is less than 0.05. For the coefficient around 0.002186, it is positive. So, if the leverage is increasing, the sustainable investment opportunities is also increasing.



ROA has a positive effect on sustainable investment opportunities. The number of t-statistics is 2.675163 and probability is 0.0080, which is less than 0.05. For the coefficient around 0.673435, it is positive. So, if the ROA is increasing, the sustainable investment opportunities is also increasing.

Total Assets Turnover has a significantly positive influence on sustainable investment opportunities. The number of t-statistics is 5.817754 and probability is 0.0000, which is less than 0.05. For the coefficient around 2.212767, it is positive. So, if the TATO is increasing, the sustainable investment opportunities is also increasing.

Audit Quality has not significant impact on sustainable investment opportunities, which means the hypothesis is rejected. The number of t-statistics is 0.068846 and probability is 0.9452, which is more than 0.05. Based on the probability is greater than 5%, the conclusion is not significant.

Table13     Moderate Regression Analysis						
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	5.326561	0.958543	5.556936	0.0000		
EM	-0.084175	0.428592	-0.196400	0.8445		
FS	-0.145480	0.030205	-4.816366	0.0000		
LEV	0.002538	0.000773	3.284370	0.0012		
ROA	0.446161	0.272144	1.639427	0.1024		
TATO	2.368666	0.384838	6.154975	0.0000		
AQ	-0.032571	0.250383	-0.130085	0.8966		
EM*AQ	-1.029049	0.487057	-2.112789	0.0356		

# Moderate Regression Analysis (MRA)

Source: Eviews 12 Ouput

The table above shows that t-statistics is 2.112789 and probability is 0.0356, which is less than 0.05. In additional, the coefficient is -1.029049, which means that the audit quality is able to significantly moderate the influence of earnings management on the sustainable investment opportunities, which means the hypothesis is accepted.

# CONCLUSION

This study aims to examine the direct influence of audit quality and earnings management on sustainable investment opportunities. Additionally, this study examines the moderating impact of audit quality on the relationship between sustainable investment opportunities and earnings management. Companies from the telecommunication and energy sectors are the objects of this research, which covers the years 2015-2022. There are 288 data used from the telecommunication and energy companies. The findings show that earnings management has a negative influence on sustainable investment opportunities. Additionally, the relationship between audit quality on sustainable investment opportunities is not significant. The last one, audit quality can reduce the negative impact of earnings management on sustainable investment opportunities. This means that high-quality audit firms can serve as an effective governance tool to reduce information asymmetry and agency problems, thereby increasing investor confidence and sustainable investment opportunities.



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