



Earnings Management and the Value Relevance of Sustainability Management: Evidence from Southeast Asian Countries

Frista Frista^{1,2*}, Lindawati Gani¹, Yulianti Abbas¹, Lianny Leo¹

¹Department of Accounting, Faculty of Economics and Business, Universitas Indonesia, Depok, Indonesia, ²Department of Accounting, Faculty of Business, Universitas Kristen Duta Wacana, Yogyakarta, Indonesia. *Email: frista@staff.ukdw.ac.id

Received: 15 January 2026

Accepted: 04 April 2026

DOI: <https://doi.org/10.32479/ijefi.23536>

ABSTRACT

This study investigates whether sustainability management leads to firm value and how the relationship is moderated by earnings management. Based on stakeholder theory and agency theory, we argue that although sustainability management can generate long-term value for firms. However, its credibility and value relevance may be questioned through earnings opportunistic activities. This study employs panel data from publicly listed firms across Southeast Asian countries (ASEAN) during the period 2015-2022 using panel regression analysis with robust estimates. Our findings show that sustainability management positively influences firm value. However, this positive effect is significantly reduced when firms engage in higher levels of accrual earnings management. These results add to the existing literature on ESG credibility, greenwashing issues, and sustainable value creation. This study offers several contributions. First, it expands the ESG and SDGs approach in the sustainability literature by including earnings management as a moderating factor. This offers a clearer understanding of how sustainability practices are viewed by capital markets. Second, it provides valuable evidence for investors, regulators, and policymakers interested in sustainable finance and corporate transparency.

Keywords: Sustainability Management, Earnings Management, Sustainable Development Goals, ASEAN

JEL Classifications: M41, G32, Q56, O53

1. INTRODUCTION

Since 2015, a new global agenda has been established by the United Nations, with 193 countries having signed it. The existence of the sustainable development goals (SDGs) has marked a new chapter in which business practices have shifted from business as usual to sustainable business (Dyllick and Muff, 2015). BST 3.0 goes beyond previous views by using a macro approach that will look from the outside-in perspective of the company's impact on society and the environment. This concept of business sustainability typology 3.0 is considered "true BST" (Dyllick and Muff, 2015).

To achieve these goals, relevant national measures are needed that are easily accessible to businesses, which are considered a major transformative force with their innovative power.

The role of accountants as a bridge between finance and sustainability is increasingly needed in relation to the existence of the sustainable development goals (SDGs). Accountants must contribute to strong and sustainable financial markets and economies to enable the SDGs to be achieved by 2030 (IFAC, 2022).

The ASEAN region provides an interesting setting for investigating this issue. ASEAN countries have experienced rapid economic growth and increasing integration into global financial markets. At the same time, sustainability reporting and ESG practices are gradually gaining attention among firms and regulators in the region. However, the quality and transparency of corporate disclosures may vary significantly across countries, which could influence how investors interpret sustainability-related information.

This study aims to examine the value relevance of sustainability management and investigate the role of earnings management in shaping this relationship among firms in ASEAN countries. Specifically, this study explores whether earnings management weakens or strengthens the association between sustainability management and firm value. By focusing on emerging economies in ASEAN, this research contributes to the growing literature on sustainability and corporate financial performance.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Stakeholder Theory

Stakeholder theory emphasizes that businesses must create value not only economically but also socially and environmentally (Freeman, 2015). Stakeholder theory can be divided into two branches: ethical stakeholder theory and normative stakeholder theory (Islam and Van Staden, 2022). Ethical stakeholder theory emphasizes that companies are ethically obligated to consider the interests of all stakeholders, not simply for strategic or profit reasons, but because it is morally right. Companies consider the environmental impacts of their operations because they believe they are morally responsible, not because they fear reputational damage or sanctions.

Stakeholder theory applies to all managerial processes in the sense that synergy and integration among all elements of a business model and its processes are crucial in achieving overall sustainable performance goals (Donaldson and Preston, 1995; Harrison et al., 2015; Rezaee, 2016). If a company does not meet the needs of its stakeholders, it may face consumer boycotts, the inability to hire the most talented people, and paying punitive fines to the government (Eccles et al., 2014).

2.2. Agency Theory

Agency theory states that the relationship between management and shareholders, which is seen as the relationship between agents and principals. Shareholders, as principals, delegate authority to management, as agents, to use and control the activities of the company. As a result, management has more adequate information about the company than shareholders. Information asymmetry between management and shareholders allows management to act opportunistically (Jensen and Dan Meckling, 1976).

The term “impression management” refers to the process by which individuals attempt to control the impressions of others (Leary and Kowalski, 1990). Impression management aims to project a positive image to stakeholders (Corazza et al., 2020). Impression management can be defined as the activity by which organizations manipulate their corporate communications to secure internal and external support (Brennan et al., 2009; Merkl-Davies et al., 2011; Ogden and Clarke, 2005).

In the context of corporate reporting, impression management occurs when management selects information to present. Furthermore, the information presented distorts readers’ perceptions of the company’s achievements (Neu et al., 1998).

Impression management is carried out through disclosure narratives that focus less on interpreting financial results (Brennan et al., 2009).

2.3. Corporate Sustainability Management

Corporate sustainability itself is defined as an effort to meet the needs of stakeholders, both directly and indirectly, in the present without compromising its ability to meet the needs of stakeholders in the future (Dyllick and Muff, 2015). The concept of sustainability continues to evolve, starting with “business-as-usual” and then progressing to business sustainability typology (BST) 1.0, then 2.0 and 3.0. Business sustainability typology (BST) is based on an organizational perspective that refers to human habits of viewing organizations. BST 1.0 and 2.0 are more based on a micro approach that looks at the perspective from the inside out (the inside-out perspective). BST 3.0 goes beyond the previous view by using a macro approach that will look from the outside in (the outside-in perspective) of the company’s impact on society and the environment. The concept of business sustainability typology 3.0 is considered the “true BST.”

One factor that can be seen as a driving force for the implementation of sustainability in organizations, including companies, is the emergence of the sustainable development goals (SDGs). The SDGs were agreed upon in September 2015 by the global community after an extensive political alignment process among various stakeholders, including global businesses and NGOs. For the period 2015–2030, the SDGs now define a new global agenda, with 193 countries having signed onto the 17 fundamental goals.

A recent emerging view adds an economic dimension to ESG, thus broadening the term to EESG. Compared with traditional ESG frameworks, the EESG framework integrates economics as a core dimension, promoting the coordinated development of economic growth, environmental protection, social responsibility, and good governance (Ma et al., 2025).

2.4. Earnings Management

Earnings management occurs when managers use judgment in financial reporting and transaction structuring to alter financial statements to mislead some stakeholders about the firm’s underlying economic performance, or to influence contractual outcomes that depend on reported accounting numbers (Dechow and Skinner, 2000). Studies on the determinants and consequences of earnings management are numerous, and most of these studies tend to focus on accrual-based earnings management (Dechow and Skinner, 2000; Jones, 1991; Kasznik, 1999; Kothari et al., 2005).

Recent literature has examined the importance of earnings management in real-life activities. Real earnings management is a deviation from normal operating practices. This deviation is motivated by managers’ desire to mislead stakeholders into believing that financial objectives have been met in normal operations (Roychowdhury, 2006). Typically, managers engage in real activities manipulation to meet certain earnings thresholds. Thus, these activities can be considered destructive to shareholder value. Findings from several subsequent studies suggest that managers make a trade-off between accrual-based earnings

management and real activities manipulation. Specifically, decisions about accrual-based earnings management follow real activities manipulation (Zang, 2011).

2.5. Hypothesis Development

Simply put, sustainability is often associated with ESG. The term itself emerged in 2004, following the UN report “Who Cares Wins,” which contained what is widely considered the first mainstream mention of ESG, explaining corporate sustainability in a modern context. Over the past two decades, several perspectives have emerged that seek to complement the traditional ESG framework. The demand for a more comprehensive sustainability framework and the effective integration of economic factors into the ESG framework has become a critical issue requiring urgent address in both academia and practice (Işık et al., 2024).

According to stakeholder theory, synergy and integration among all elements of a business model and its processes are crucial in achieving overall sustainable performance goals (Donaldson and Preston, 1995; Harrison et al., 2015; Rezaee, 2016). Introducing sustainability into a business will have a positive impact on sustainability.

Previous research has examined several dimensions and partially tested them against corporate value: Three dimensions: Economic transparency and profitability; social responsibility; and environmental sustainability (Lee and Saen, 2012). The environmental dimension: Environmental performance rewards (Klassen and McLaughlin, 1996) The social dimension: Corporate social responsibility (Ammann et al., 2011; Chao, 2010; Cochran and Wood, 1984; Eccles et al., 2014; Erhemjamts et al., 2013; Huang et al., 2020; Lin et al., 2009; Maqbool and Zameer, 2018; McWilliams and Siegel, 2000; Pava and Krausz, 1996; Simpson and Kohers, 2002; Tsafack and Guo, 2021). Governance dimensions: economic transparency and profitability.

Prior studies have documented that enhanced ESG disclosures are positively associated with firm value (Sun et al., 2023), supporting the argument that sustainability management contributes to long-term value creation. From a long-term perspective, companies that transparent economic and financial activities will increase trust and generate positive perceptions from shareholders and investors. Superior sustainability performance will provide benefits that increase firm value. This improvement in company performance will be sustained throughout the company (Epstein and Rejz Buhovac, 2014; Lee and Saen, 2012).

Hypothesis 1 is further formulated as follows:

H₁: Sustainability management has a positive effect on firm value.

Furthermore, when discussing the implementation of sustainability management within a company, the key actors who will initiate it are inseparable. In other words, the role of a company manager is crucial in determining the success of implementing sustainability management.

From the perspective of agency theory, the relationship between management and shareholders is viewed as an agent-principal

relationship. Shareholders, as principals, delegate authority to management, as agents, to utilize and control company activities. Management possesses more information than shareholders, creating information asymmetry that allows management to act opportunistically (Jensen and Dan Meckling, 1976). Management may use sustainability claims without actual implementation while engaging in earnings manipulation to create a positive short-term image. As a result, investors and stakeholders question the integrity of sustainability reporting, reducing trust and the company’s long-term value.

Management can engage in earnings management because of information asymmetry between management and stakeholders, which allows management to manipulate information reported to stakeholders, including revenue figures. Meanwhile, profit figures are a key consideration for stakeholders, particularly investors, in assessing management performance and making investment decisions. Therefore, earnings management can lead stakeholders to misjudge management performance and make investment decisions, which can be detrimental to stakeholders (Syafitri et al., 2020).

Furthermore, this can lead to a conflict between short-term and long-term goals. With earnings management, managers focus more on achieving short-term profit targets through accounting manipulation, which can divert resources from sustainability investments that have positive long-term impacts. If sustainability reporting is used solely as a marketing tool, the company’s value will not increase. A positive impact on firm value can only be achieved if supported by ethical practices.

Thus, hypothesis 2 is formulated as follows:

H₂: Earnings management weakens the positive effect of sustainability management on firm value.

H_{2a}: Accrual earnings management weakens the positive effect of sustainability management on firm value.

H_{2b}: Real earnings management weakens the positive effect of sustainability management on firm value.

Figure 1 illustrates the proposed relationships between corporate sustainability management, earnings management, and firm value.

3. RESEARCH METHODOLOGY

3.1. Choosing a Sample and Getting Data

The companies used in this study sample are non-banking and financial companies listed on stock exchanges in the Southeast Asian region that publish sustainability reports. The development of sustainability reporting in Southeast Asia has made significant progress recently, with various regulatory initiatives, regional collaborations, and technology integration. Overall, Southeast Asia is moving towards more standardized and transparent sustainability reporting, although at varying speeds across countries. Singapore, Malaysia, and the Philippines have committed to adopting or using the ISSB Standards by 2025. Indonesia itself is scheduled to implement its sustainability disclosure standards (DSS) on January 1, 2027 (IAI, 2025).

The six countries sampled in this study are Indonesia, Malaysia, Vietnam, the Philippines, Singapore, and Thailand. Data for Laos, Cambodia, Myanmar, and Brunei Darussalam are not available in the Eikon database and therefore will not be used as samples. Observations will be conducted between 2015 and 2022.

The sample selection procedure is done by reducing observations with missing values of earnings management. The total observations can be seen in Table 1.

3.2. Measurement of Variables

To measure firm value, Tobin's Q (TOBINQ) is used. This measurement can represent the level of a company's intangible assets and its long-term value (Cahan et al., 2016). Measured as the market value of shares plus the value of preferred stock, long-term debt, and current liabilities, divided by total assets.

Therefore, to determine whether the market ultimately values the decision after deeper analysis, Tobin's Q (t+1) and Tobin's Q (t+2) are used. Tobin's Q t+1 is used to examine how a company's decisions or policies in the current year (t) affect the company's market value in 1 year (t+1). Tobin's Q t+2 is used to examine how a company's decisions or policies in the current year (t) affect the company's market value in 2 years (t+2).

A gap framework that serves as a basis for addressing the major challenges the world faces collectively, by sector, across industries, for a company, or as a responsible management accounting educator, building an "outside-in" perspective on true business sustainability (Muff et al., 2017). This framework is particularly well-suited for businesses because it can be used as a strategic tool to identify long-term business opportunities (Muff et al., 2018). The gap framework bridges efforts to achieve the UN Sustainable Development Goals agenda with relevant measures that are easily accessible to businesses.

This gap framework will then be grouped into four dimensions: governance, economics, society, and planet (Muff et al., 2017). Furthermore, the gap framework will be used as a measurement scheme for corporate sustainability management through 22 issues that will be found in corporate sustainability reports. Unlike the measurement used by Muff et al. (2017), this study will utilize 22 measurement issues, excluding public finance and structural resilience, which are considered less suitable for corporate-level application.

The four dimensions of EESG are: (1) The environmental side, related to issues of climate change, water, and biodiversity conservation, which are generally voiced by environmental activists; (2) The social side; labor unions/workers who fight for welfare and safety at work. In addition, labor activists are very focused on the issue of child labor and forced labor, which in the modern era still occurs; (3) The governance side, there are demands from investors regarding transparency and ensuring the integrity of the company to avoid violations of the law; (4) Finally, from the economic side, with the business processes of companies that have implemented a circular economy, supported by innovation and technology, it is hoped that they will be able to provide additional benefits for shareholders.

To measure the corporate sustainability management, the approach used by Islam and van Staden (2018) with a scale of 0/1/2/3 (0 means not disclosed, 1 means qualitative - the issue is mentioned briefly, 2 means descriptive - the issue is mentioned without monetary terms (numbers) or real physical quantities, 3 means quantitative - clearly stated in monetary terms (numbers) or real physical quantities).

Beattie (2014) confirmed that recent studies have used a scale-based disclosure index. This approach is similar to previous studies that assess the completeness of voluntary CSR disclosures

Table 1: Total observations

Panel A									
Sample by industry	2015	2016	2017	2018	2019	2020	2021	2022	Total
Communication service	5	7	9	12	15	20	30	44	157
Consumer discretionary	6	9	17	36	45	68	88	122	406
Consumer staples	9	13	27	36	44	56	96	129	426
Energy	11	17	32	39	45	50	62	69	357
Health care	3	3	13	15	21	28	35	46	166
Industrials	11	20	49	81	93	112	151	201	742
Information technology	1	1	3	7	8	12	20	26	79
Materials	11	12	22	29	43	51	74	106	360
Real estate	15	18	42	58	64	80	120	137	568
Utilities	5	7	9	12	17	19	25	27	141
Total	77	107	223	325	395	496	703	907	3.233
Panel B									
Sample by country	2015	2016	2017	2018	2019	2020	2021	2022	Total
Indonesia	17	25	38	47	75	112	258	385	961
Malaysia	10	17	34	45	50	60	79	106	427
Philippines	7	8	10	14	28	36	45	57	226
Singapore	14	20	95	162	179	214	238	264	1.221
Thailand	28	36	41	52	58	69	75	85	527
Vietnam	1	1	5	5	5	5	8	10	40
Total	77	107	223	325	395	496	703	907	3.233

Source: Author's calculations

(Beattie, 2014; Cho et al., 2015; Clarkson et al., 2008; Islam and Van Staden, 2018; Van Staden and Hooks, 2007).

Accrual earnings management (AEM), using discretionary accruals calculated in the Modified-Jones Model (Dechow et al., 1995). All variables are scaled with total assets t-1. Discretionary accruals (DA) are computed as the residuals of the regression equation. The measures of real activities earnings management (REM) closely follow that of (Hu et al., 2022; Roychowdhury, 2006; Zang, 2011). Manipulation through real operational activities that are manifested through three channels: (i) Sales manipulation (ii) Engaging in overproduction (iii) Reducing discretionary expenditures.

The control variables used in this study are company size (the natural logarithm of total assets), profitability (net profit after tax scaled by total assets), board size (the natural logarithm of the number of board members), and capital expenditure (Capex) scaled by total assets. Profitability is measured using: Return on equity (ROE), calculated as the ratio of net income before interest and taxes (EBIT) divided by total equity; Return on Assets (ROA), calculated as the ratio of net income before interest and taxes (EBIT) divided by total assets (Clarkson et al., 2008; De Villiers et al., 2011).

Model (1) is used to test the effect of corporate sustainability management on corporate value. This is used to test hypothesis 1.

$$FV_{it+1} = \beta_0 + \beta_1SUS_{it} + \beta_2Size_{it} + \beta_3Capex_{it} + \beta_4Boardsize_{it} + \beta_5ROA_{it} + \beta_6ROE_{it} + \beta_7DER_{it} + \beta_8DAR_{it} + \epsilon_{it} \quad (1)$$

Where for each company (i)-year (t) observation, the company's market value in year t+1 (FVt+1), the company's market value in year t+2 (FVt+2), corporate sustainability management (SUS), return on Assets (ROA), return on equity (ROE), company size (Size) the natural logarithm of a company's total assets, the natural logarithm of the number of board members (board-size), capital expenditure scaled by total assets (Capex).

Model (2) is used to test hypothesis whether earnings management will weaken the positive influence of corporate sustainability management on firm value.

$$FV_{it+1} = \beta_0 + \beta_1SUS_{it} + \beta_2AEM_{it} + \beta_3SUS_{it} \times AEM_{it} + \beta_4Size_{it} + \beta_5Capex_{it} + \beta_6Boardsize_{it} + \beta_7ROA_{it} + \beta_8ROE_{it} + \beta_9DER_{it} + \beta_{10}DAR_{it} + \epsilon_{it} \quad (2)$$

$$FV_{it+1} = \beta_0 + \beta_1SUS_{it} + \beta_2REM_{it} + \beta_3SUS_{it} \times REM_{it} + \beta_4Size_{it} + \beta_5Capex_{it} + \beta_6Boardsize_{it} + \beta_7ROA_{it} + \beta_8ROE_{it} + \beta_9DER_{it} + \beta_{10}DAR_{it} + \epsilon_{it} \quad (3)$$

Where for each company (i) in year (t) of observation, the company's market value in year t+1 (FVt+1), the company's market value in year t+2 (FVt+2), corporate sustainability management (SUS), EM is earnings management, return on assets (ROA), return on equity (ROE), company size (Size) is the natural logarithm of a company's total assets, the number of board members (board-size), and capital expenditures scaled by total assets (Capex).

Table 2: Descriptive statistics

Issues	Mean	Standard deviation	Minimum	Maximum
Panel A: Environment				
Biodiversity	1.141	1.289	0	3
Carbon	2.559	1.011	0	3
Oceans	0.805	1.289	0	3
Land and forest	1.483	1.436	0	3
Clean air	1.551	1.377	0	3
Clean energy	2.883	0.513	0	3
Water	2.735	0.795	0	3
Waste treatment	2.653	0.853	0	3
Panel B: Social				
Employment	2.983	0.180	0	3
Health	2.829	0.610	0	3
Equal opportunity	2.940	0.348	0	3
Education	2.757	0.736	0	3
Living condition	1.738	1.430	0	3
Social integration	2.639	0.812	0	3
Quality of life	2.267	1.246	0	3
Panel C: Economic				
Resources use	2.550	0.759	0	3
Sustainable consumption	2.589	0.706	0	3
Sustainable production	2.531	0.748	0	3
Innovation	2.512	0.792	0	3
Panel D: Governance				
Peace and cooperation	2.716	0.591	0	3
Business integrity	2.739	0.546	0	3
Transparency	2.742	0.531	1	3

Source: Author's calculations

4. RESEARCH

Table 2 shows the descriptive statistics of the 22 corporate sustainability management measurement items.

Table 3 reports the Pearson's correlation. The sample period is from 2015 to 2022.

All columns in Table 4 show the positive effects of the relationship between sustainability management on firm value at $P \leq 0.05$. The study proved that sustainability management has a positive effect on firm value one year later (t+1). Furthermore, Table 5 columns (1), (2) and (3) also show that sustainability management positively and significantly increases firm value at $p \leq 0.05$ two year later (t+2). This result is in line with H_1 .

In the short term, all columns in Table 4 do not provide evidence that accrual earnings management weakens the positive influence of sustainability management on firm value. Then, Table 5 Column 3, shows that the moderating effect of accrual earnings management weakens the positive influence of sustainability management on firm value at $P \leq 0.05$. This indicates that, it is proven that in the longer term, the effect of accrual earnings management weakens the positive influence of sustainability management on firm value. Positive effects on firm value can only be achieved if supported by ethical practices. This is in line with H_{2a} .

To obtain more robust results, several additional tests were conducted. First, using a subsample of Southeast Asian countries.

Table 3: Correlation matrices

Variables	FV _{t+1}	SUS	Size	Capex	Boardsize	ROA	ROE	DER
FV _{t+1}	1.000							
SUS	0.008***	1.000						
Size	-0.074	0.535	1.000					
Capex	0.017	0.049	-0.022	1.000				
Boardsize	-0.030	0.324	0.598	0.042	1.000			
ROA	0.004	0.183	0.107	0.148	0.117	1.000		
ROE	0.002	0.150	0.092	0.124	0.097	0.634	1.000	
DER	-0.012	-0.027	-0.038	0.062	-0.028	0.197	0.105	1.000

Variables	FV _{t+2}	SUS	Size	Capex	Boardsize	ROA	ROE	DER
FV _{t+2}	1.000							
SUS	0.0150***	1.000						
Size	-0.063	0.535	1.000					
Capex	0.0333	0.049	-0.022	1.000				
Boardsize	-0.0315	0.324	0.598	0.042	1.000			
ROA	0.0039	0.183	0.107	0.147	0.117	1.000		
ROE	0.0145	0.150	0.092	0.124	0.097	0.634	1.000	
DER	-0.019	-0.0268	-0.038	0.062	-0.028	0.197	0.105	1.000

*, **, ***Indicate statistical significance at the 10%, 5%, and 1%, respectively

Table 4: Sustainability management, earnings management, and firm value (t+1)

Variables	(1)		(2)		(3)	
	Coefficient	P> t	Coefficient	P> t	Coefficient	P> t
Sustainability management (SUS)	+3.397	0.002***	3.396	0.002***	+3.168	0.006***
Earnings management (EM)			0.016	0.947		
SUS×EM			-0.054	0.878		
Accrual EM (AEM)					-0.353	0.944
Real EM (REM)					-1.01	0.318
SUS×AEM					-0.106	0.987
SUS×REM					1.86	0.367
Control variables		Yes		Yes		Yes
Firm fixed effects		Yes		Yes		Yes
Year fixed effects		Yes		Yes		Yes
Observations		3233		3233		3233
Adjusted R ²		0.0226		0.0226		0.0242

Source: Author's calculations. *, **, ***denotes significance at 10%, 5%, and 1% levels, respectively

Table 5: Sustainability management, earnings management, and firm value (t+2)

Variables	(1)		(2)		(3)	
	Coefficient	P> t	Coefficient	P> t	Coefficient	P> t
Sustainability management (SUS)	+2.951	0.001***	+9.307	0.013**	+9.332	0.013**
Earnings management (EM)			0.063	0.903		
SUS×EM			-0.649	0.321		
Accrual EM (AEM)					+42.529	0.021**
Real EM (REM)					-0.842	0.797
SUS×AEM					-40.549	0.014**
SUS×REM					-2.39	0.738
Control variables		Yes		Yes		Yes
Firm fixed effects		Yes		Yes		Yes
Year fixed effects		Yes		Yes		Yes
Observations		3233		3233		3233
Adjusted R ²		0.0111		0.0089		0.0090

Source: Author's calculations. *, **, ***denotes significance at 10%, 5%, and 1% levels, respectively

Table 6, Panel A Column (1) shows that in Indonesia, the SUS variable has a positive coefficient on Tobin's Q t+2 (12.338) at the α level of 10%. In Panel A Column (2), none of the results are significant. In Panel A Column (3), in Singapore, the SUS×AEM variable has a negative coefficient on Tobin's Q t+2 (-54.771) at the α level of 1%. Finally, in Panel A, Column (4), in Vietnam, the SUS×REM variable has a positive coefficient on Tobin's Q t+2 (4.77e+09) at the α level of 1%.

Second, using a subsample of industry types. Table 6, Panel B, Column (1) shows that in the manufacturing industry, the SUS variable has a positive coefficient on Tobin's Q t+2 (32.697) at the α level of 10%. Panel B Column (2) has no significant results. Panel B Column (3) shows that in the non-manufacturing industry, the SUS × AEM variable has a negative coefficient on Tobin's Q t+2 (-47.676) with an α level of 1%. Finally, Panel B column (4) has no significant results. Our findings in these robustness test provide

Table 6: Robustness test - sustainability management, earnings management, and firm value (t+2) by country and industry type

Variables	(1) SUS	(2) SUS×EM	(3) SUS×AEM	(4) SUS×REM
Panel A: Sub sample country				
Indonesia	12.338×0.083*	-1.940×0.366	-37.279×0.489	5.53e+07×0.746
Malaysia	8.907×0.960	3.190×0.433	-163.698×0.174	4.36e+09×0.181
Philippines	2.396×0.584	0.124×0.455	-0.795×0.920	-3.48e+07×0.258
Singapore	-0.394×0.915	-0.088×0.884	-54.771×0.000***	9.12e+07×0.074*
Thailand	0.617×0.945	0.083×0.841	7.625×0.468	2.97e+08×0.211
Vietnam	-11.65×0.015**	-0.196×0.852	-24.123×0.485	4.77e+09×0.001***
Panel B: Sub sample industry type				
Manufacturing	32.697×0.000***	-0.503×0.548	-28.371×0.370	-3.37×0.752
Non-Manufacturing	0.843×0.848	-0.871×0.406	-47.676×0.017*	1.45×0.171

Source: Author's calculations. *, **, ***denotes significance at 10%, 5%, and 1% levels, respectively

evidence that sustainability management positively affects firm value; however, this positive effect is significantly weakened when firms engage in higher levels of accrual earnings management.

5. DISCUSSION

From an environmental perspective, corporate sustainability management activities through clean energy are increasingly being implemented. The issue of “clean energy” describes a situation where companies seek access to affordable and reliable clean energy derived from renewable sources such as wind, solar, or geothermal energy. Renewable energy produces electricity with little or no pollution, reducing the effects of global warming. The issue of clean energy is closely aligned with sustainable development goal 7.

However, there is still limited attention to sustainable marine issues and biodiversity. The issue of “biodiversity” describes a world where terrestrial and aquatic ecosystems are balanced, healthy, and thriving, ensuring the sustainability of nature for all forms of life on the planet. Stable and favorable climate conditions are conducive to maintaining various species living in their natural habitats. The issue of biodiversity is linked to Sustainable Development Goals 14 and 15.

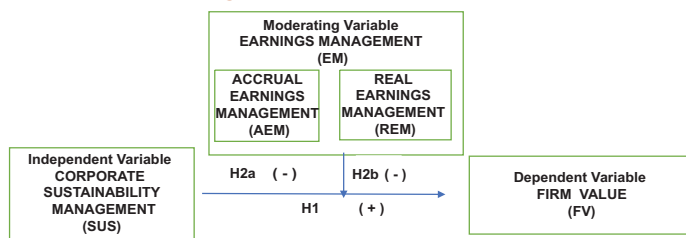
From an economic perspective, the efficient and responsible consumption of resources (energy, water, land, raw materials), the circular economy, consumer-safe products and services, technological advancements, and investment in innovation are key areas of focus in corporate sustainability management activities. The concept of “sustainable consumption” seeks to describe a situation in which companies consume materials, products, and services in a manner that has minimal impact on the environment, while respecting planetary boundaries. Consumption awareness results from a sustainable lifestyle adopted through the behavior of purchasing, consuming, and reusing goods and commodities (circular economy) while respecting the environment. The issue of sustainable consumption is linked to Sustainable Development Goal 12. The issue of “sustainable production” frames a situation where products and services are produced with due regard for potential environmental, social, and economic costs and benefits. The goods produced and services delivered are safe for workers and healthy for consumers and communities. Economic actors are healthy, solid,

and responsible. Waste and ecologically inappropriate by-products that pose a risk to human health or the environment are avoided throughout the supply chain. The issue of sustainable production is closely aligned with Sustainable Development Goal 12. The issue of Innovation describes a situation where companies drive technological progress, invest in innovation, and infrastructure to support sustainable development and human well-being. The issue of Innovation is linked to sustainable development goal 9.

From a social perspective, corporate sustainability management activities, including protecting the health and safety of workers, have become a primary concern for companies. The issue of “health” aligns closely with sustainable development goals 2 and 3. “Health” describes a universal and financially sustainable system that provides employees with safe and affordable access to quality healthcare. This system helps employees stay healthy throughout their lives by promoting healthy lifestyles, incentivizing healthy and balanced nutrition, and developing environments and infrastructure that facilitate health. Meanwhile, companies have paid limited attention to the living conditions of communities. The issue of living conditions reflects a company’s commitment to helping provide decent living conditions for surrounding communities. An adequate standard of living implies creating inclusive, safe, resilient, and sustainable housing. Residents are provided with safe access to drinking water, hygiene and sanitation, clean energy, adequate housing, and safe transportation. The issue of living conditions is related to Sustainable Development Goals 6, 7, and 11.

From a governance perspective, companies have placed a high level of emphasis on business integrity, transparency, governance, and compliance with applicable laws. This aspect relates to Sustainable Development Goals 10, 16, and 17. The issue of “business integrity” seeks to describe a situation in which businesses are encouraged, enforced, enabled, and incentivized to be a truly positive force for society. This requires an interaction between how businesses conduct themselves in terms of embracing responsibility and sustainability, and preventing negative, unethical, or disruptive practices. The issue of “transparency” describes a state of coherence, stability, and fairness in their actions and decisions. This is the path to achieving good governance.

These results are consistent with stakeholder theory (Harrison et al., 2015), which suggests that firms creating value for stakeholders

Figure 1: Research framework

are more likely to achieve superior long-term performance. When companies implement sustainability management practices that address stakeholder expectations, they enhance stakeholder trust and legitimacy, which in turn contributes to increased firm value. This finding is also supported by the sustainability accounting perspective, which emphasizes that integrating environmental, social, and economic dimensions into business practices and reporting enhances transparency and strengthens stakeholder relationships (Schaltegger et al., 2006). Consequently, business practices that incorporate governance, economic, environmental, and social aspects further reinforce the firm's long-term value creation.

There needs to be a shared awareness that sustainability is not simply a matter of companies producing sustainability reports; rather, concrete actions are needed to address sustainability challenges through sustainability management that integrates environmental, economic, social, and governance aspects, which are then communicated to stakeholders through sustainability disclosures.

Impression management aims to project a positive image to stakeholders (Corazza et al., 2020). Management may use sustainability claims without actual implementation while engaging in earnings manipulation to create a short-term positive image. As a result, investors and stakeholders doubt the integrity of sustainability reporting, reducing trust and the company's long-term value. Furthermore, this creates a conflict between short-term and long-term goals. If sustainability reporting is used solely as an image-building tool, the company's value will not increase.

Conversely, the results cannot yet prove that real earnings management weakens the positive effect of sustainability management on firm value for both the one or two years later. This result is in line with previous findings related to the measurement of sustainability management which found that the company has given primary attention to the principles of ethics, governance and transparency which are part of the governance dimension. Companies that implement sustainability management base their implementation on ethical considerations and good governance, and do not engage in real earnings management, the effects of which would be much worse than accrual earnings management.

6. CONCLUSION, IMPLICATIONS AND FUTURE STUDIES

This study examines whether sustainability management enhances firm value and investigates the moderating role of earnings

management in shaping this relationship. Research results demonstrate that the implementation of corporate sustainability management increases firm value. This finding aligns with ethical stakeholder theory mentioned above. When a company implements sustainability management practices that address stakeholder expectations, this can provide benefits in the form of increased firm value. Business practices that demonstrate the implementation of sustainability management across governance, economics, environment, and society (EESG) will increase firm value in the long term.

However, this positive effect is significantly weakened when firms engage in higher levels of accrual earnings management. This finding suggests that the company must give primary attention to the principles of ethics, governance, and transparency which are part of the governance dimension (1) Ethics; through the enforcement of ethics, the company establishes, promotes, monitors, and maintains legal and ethical standards and practices in dealing with all company stakeholders. (2) Governance; The company carries out governance of all its resources carefully and effectively. (3) Transparency; The company has provided timely disclosure of information about its products, services, and activities, thus enabling stakeholders to make informed decisions. These results prove that companies that implement sustainability management are based on ethical considerations and good governance.

This study has several limitations. First, the analysis relies on secondary data derived from publicly available sustainability disclosures, which may not fully capture the quality or substance of firms' sustainability practices. Second, the sample is limited to publicly listed firms in an emerging market context, which may restrict the generalizability of the findings to developed economies. These limitations open avenues for future research. Subsequent studies may incorporate alternative measures of sustainability performance, such as third-party ESG ratings. Future research could also explore cross-country comparisons or longitudinal designs to examine the long-term value implications of sustainability management under different institutional settings.

REFERENCES

- Ammann, M., Oesch, D., Schmid, M.M. (2011), Corporate governance and firm value: International evidence. *Journal of Empirical Finance*, 18(1), 36-55.
- Beattie, V. (2014), Accounting narratives and the narrative turn in accounting research: Issues, theory, methodology, methods and a research framework. *The British Accounting Review*, 46, 111-134.
- Brennan, N.M., Guillamon-Saorin, E., Pierce, A. (2009), Methodological Insights: Impression management: Developing and illustrating a scheme of analysis for narrative disclosures - a methodological note. *Accounting Auditing and Accountability Journal*, 22(5), 789-832.
- Cahan, S.F., De Villiers, C., Jeter, D.C., Naiker, V., Van Staden, C.J. (2016), Are CSR disclosures value relevant? Cross-country evidence. *European Accounting Review*, 25, 579-611.
- Chao, C.F., Hsu, C.C., Yeh, H.S. (2010), The relationship between information transparency and firm value: Evidence from Taiwan. *International Journal of Business Excellence*, 3(2), 125-141.
- Cho, C.H., Michelon, G., Patten, D.M., Roberts, R.W. (2015), CSR

- disclosure: The more things change? *Accounting Auditing and Accountability Journal*, 28(1), 14-35.
- Clarkson, P.M., Li, Y., Richardson, G.D., Vasvari, F.P. (2008), Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting Organizations and Society*, 33, 303-327.
- Cochran, P.L., Wood, R.A. (1984), Corporate social responsibility and financial performance. *The Academy of Management Journal*, 27(1), 42-56.
- Corazza, L., Truant, E., Scagnelli, S.D., Mio, C. (2020), Sustainability reporting after the Costa Concordia disaster: A multi-theory study on legitimacy, impression management and image restoration. *Accounting Auditing and Accountability Journal*, 33(8), 1909-1941.
- De Villiers, C., Naiker, V., Van Staden, C.J. (2011), The effect of board characteristics on firm environmental performance. *Journal of Management*, 37(6), 1636-1663.
- Dechow, P.M., Skinner, D.J. (2000), Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons*, 14(2), 235-250.
- Dechow, P.M., Sloan, R.G., Sweeney, A.P. (1995), Detecting earnings management. *The Accounting Review*, 70(2), 193-225.
- Donaldson, T., Preston, L.E. (1995), The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review*, 20(1), 65-91.
- Dyllick, T., Muff, K. (2015), Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability: Introducing a typology from business-as-usual to true business sustainability. *Organization and Environment*, 29(2), 156-174.
- Eccles, R.G., Ioannou, I., Serafeim, G. (2014), The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835-2857.
- Elkington, J. (1997), *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. Oxford: Capstone.
- Epstein, M.J., Rejc Buhovac, A. (2014), *Making Sustainability Work: Best Practices in Managing and Measuring Corporate Social, Environmental and Economic Impacts*. 2nd ed. London: Routledge.
- Erhemjants, O., Li, Q., Venkateswaran, A. (2013), Corporate social responsibility and its impact on firms' investment policy, organizational structure, and performance. *Journal of Business Ethics*, 118(2), 395-412.
- Freeman, R.E. (2015), *Strategic Management: A Stakeholder Approach*. Cambridge: Cambridge University Press.
- Harrison, J.S., Freeman, R.E., Cavalcanti Sá De Abreu, M. (2015), Stakeholder theory as an ethical approach to effective management: Applying the theory to multiple contexts. *Review of Business Management*, 17(55), 858-869.
- Huang, P., Lu, Y., Wee, M. (2020), Corporate governance analysts and firm value: Australian evidence. *Pacific Basin Finance Journal*, 63, 101430.
- Hu, F., Kurnadi, Y., Wang, J., Wang, Y. (2022), Insider trading restrictions and real activities earnings management: International evidence. *Journal of International Financial Markets, Institutions and Money*, 80, 101641.
- IAI. (2025), Indonesia Launches Sustainability Disclosure Standards based on IFRS S1 and S2. Available from: https://web.iaiglobal.or.id/Berita-IAI/detail/indonesia_launches_sustainability_disclosure_standards_based_on_ifrs_s1_and_s2#gsc.tab=0
- IFAC. (2022), Digital Transformation and the Role of Accounting and Finance Professionals in this New Era. Available from: <https://www.ifac.org/knowledge-gateway/artificial-intelligence-technology/publications/digital-transformation-and-role-accounting-and-finance-professionals-new-era>
- Işık, C., Ongan, S., Islam, H., Sharif, A., Balsalobre-Lorente, D. (2024), Evaluating the effects of ECON-ESG on load capacity factor in G7 countries. *Journal of Environmental Management*, 360, 121177.
- Islam, MA., Van Staden, C.J. (2018), Social movement NGOs and the comprehensiveness of conflict mineral disclosures: Evidence from global companies. *Accounting Organizations and Society*, 65, 1-19.
- Jensen, M., Dan Meckling, W. (1976), Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Jones, J.J. (1991), Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193-228.
- Kaszniak, R. (1999), On the association between voluntary disclosure and earnings management. *Journal of Accounting Research*, 37(1), 57-81.
- Klassen, R., McLaughlin, C. (1996), The impact of environmental management on firm performance. *Management Science*, 42, 1199-1214.
- Kothari, S.P., Leone, A.J., Wasley, C.E. (2005), Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39, 163-197.
- Leary, M.R., Kowalski, R.M. (1990), Impression management: A literature review and two-component model. *Psychological Bulletin*, 107(1), 34-47.
- Lee, K.H., Saen, R.F. (2012), Measuring corporate sustainability management: A data envelopment analysis approach. *International Journal of Production Economics*, 140(1), 219-226.
- Lin, C.H., Yang, H.L., Liou, D.Y. (2009), The impact of corporate social responsibility on financial performance: Evidence from business in Taiwan region. *Technology in Society*, 31, 56-63.
- Ma, Y., Loh, L., Yin, Z.J. (2025), Integrating economics, environment, social, and governance (EESG): A more comprehensive sustainable framework. *Innovation and Green Development*, 4(1), 100199.
- Maqbool, S., Zameer, N. (2018), Corporate social responsibility and financial performance: An empirical analysis of Indian banks. *Future Business Journal*, 4, 84-93.
- McWilliams, A., Siegel, D. (2000), Corporate social responsibility and financial performance: Correlation or misspecification? *Strategic Management Journal*, 21(5), 603-609.
- Merkel-Davies, D.M., Brennan, N.M., McLeay, S.J. (2011), Impression management and retrospective sense-making in corporate narratives: A social psychology perspective. *Accounting, Auditing Accountability Journal*, 24(3), 315-344.
- Muff, K., Kapalka, A., Dyllick, T. (2017), The gap frame - translating the SDGs into relevant national grand challenges for strategic business opportunities. *The International Journal of Management Education*, 15(2), 363-383.
- Muff, K., Kapalka, A., Dyllick, T. (2018), Moving the world into a safe space-the GAPFRAME methodology. *The International Journal of Management Education*, 16(3), 349-369.
- Neu, D., Warsame, H., Pedwell, K. (1998), Managing public impressions: Environmental disclosures in annual reports. *Accounting Organizations and Society*, 23, 265-282.
- Ogden, S., Clarke, J. (2005), Customer disclosures, impression management and the construction of legitimacy. *Accounting Auditing Accountability Journal*, 18(3), 313-345.
- Pava, M.L., Krausz, J. (1996), The association between corporate social-responsibility and financial performance: The paradox of social cost. *Journal of Business Ethics*, 15, 321-357.
- Rezaee, Z. (2016), Business sustainability research: A theoretical and integrated perspective. *Journal of Accounting Literature*, 36(1), 48-64.
- Roychowdhury, S. (2006), Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42, 335-370.
- Schaltegger, S., Bennett, M., Burritt, R., editors. (2006), *Sustainability accounting and reporting: Development, linkages and reflection*. An

- introduction. In: Sustainability Accounting and Reporting. Vol. 21. Dordrecht: Springer.
- Simpson, W.G., Kohers, T. (2002), The link between corporate social and financial performance: Evidence from the banking industry. *Journal of Business Ethics*, 35, 97-109.
- Sun, Y., Xu, C., Ding, R., Cao, Y. (2023), Does innovation in environmental, social, and governance disclosures pay off in China? An integrated reporting perspective. *Borsa Istanbul Review*, 23(3), 600-613.
- Syafitri, R., Afdhal, M., Mayapada, A.G. (2020), Earnings management in the pre and post extensible business reporting language period in Indonesia. *The Indonesian Journal of Accounting Research*, 23(1), 459.
- Tsafack, G., Guo, L. (2021), Foreign shareholding, corporate governance and firm performance: Evidence from Chinese companies. *Journal of Behavioral and Experimental Finance*, 31, 100516.
- Van Staden, C.J., Hooks, J. (2007), A comprehensive comparison of corporate environmental reporting and responsiveness. *The British Accounting Review*, 39(3), 197-210.
- Zang, A.Y. (2012), Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The Accounting Review*, 87(2), 675-703.