

Sustainability disclosure as a mediator: The effects of profitability, leverage, and institutional ownership on firm value in Indonesian Banking (2021–2024)

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ABSTRACT

This study examines the effects of profitability, leverage, and institutional ownership on sustainability disclosure and firm value among banking companies listed on the Indonesia Stock Exchange during 2021–2024, addressing persistent variation in disclosure quality despite the rapid rise in sustainability-reporting compliance. Using a quantitative, explanatory design with Structural Equation Modeling–Partial Least Squares (SEM-PLS), the study analyzes 136 firm-year observations from 34 banks selected through purposive sampling. The structural model explains 26.2% of the variance in firm value ($R^2 = 0.262$) and 10.8% of the variance in sustainability disclosure ($R^2 = 0.108$). Leverage ($\beta = -0.214$; $p = 0.004$) and institutional ownership ($\beta = -0.273$; $p = 0.001$) significantly and negatively affect sustainability disclosure, whereas profitability shows no significant effect ($\beta = 0.020$; $p = 0.819$). Sustainability disclosure ($\beta = 0.392$; $p < 0.001$), profitability ($\beta = 0.135$; $p = 0.001$), and institutional ownership ($\beta = -0.176$; $p = 0.046$) significantly affect firm value, while leverage exerts no significant direct effect ($p = 0.206$). Sustainability disclosure fully mediates the leverage–firm value relationship ($p = 0.009$) and partially mediates the institutional ownership–firm value relationship ($p = 0.002$), but does not mediate the profitability–firm value relationship ($p = 0.820$). By repositioning sustainability disclosure as a mediating mechanism and applying a banking-adjusted GRI checklist within a highly leveraged, capital-regulated industry, this study provides novel evidence that sustainability disclosure functions as a critical non-financial channel linking financial and governance characteristics to firm value. The findings offer practical implications for bank management seeking to strengthen disclosure quality and for regulators, including Indonesia's Financial Services Authority (OJK) and the Indonesian Institute of Accountants (IAI), in advancing forthcoming sustainability-disclosure standards.

Keywords: firm value; institutional ownership; leverage; profitability; sustainability disclosure

JEL Classification: G21; M41

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1. Introduction

Sustainability reporting has developed rapidly at both the global and national levels, driven by growing awareness of environmental and social responsibility, rising investor expectations, and stronger regulatory pressure for transparency regarding the sustainability impacts of corporate operations (IFAC, 2025). In Indonesia, this development was reinforced by the launch of the Roadmap of Indonesian Sustainability Disclosure Standards by the Indonesian Institute of Accountants in December 2024 and the formal adoption of PSPK 1 and PSPK 2 in July 2025, which are scheduled to become effective on 1 January 2027 (IAI, 2024, 2025a, 2025b).

In the capital-market context, sustainability reporting among listed firms has risen sharply. Indonesia Stock Exchange data show that the number of issuers submitting sustainability reports increased from 153 firms (19.8%) in 2020 to 873 firms (94.7% of the 922 listed issuers) for the 2024 reporting year (Bursa Efek Indonesia, 2022, 2024; IDX Channel, 2025). Although this trend indicates that sustainability reporting has shifted from a largely voluntary practice toward a more institutionalized expectation following POJK No. 51/POJK.03/2017, substantial differences remain in the quality and comprehensiveness of disclosure. This condition indicates that the voluntary dimension of sustainability disclosure remains relevant, because firms continue to compete through the depth, breadth, and credibility of the ESG information they disclose beyond minimum regulatory requirements (Hummel and Schlick, 2016; Maryana and Carolina, 2021; Masyitoh and Indrabudiman, 2024).

The banking sector provides an especially important setting for this issue. Banks play a strategic role in allocating capital across the economy, including to sectors with material environmental and social risks. Consequently, the quality of

sustainability disclosure in banking institutions reflects not only reporting practices but also the extent to which banks manage ESG risks in their financing portfolios (OJK, 2023). This study documents substantial variation in disclosure quality among Indonesian listed banks even when reporting compliance is already high. Such variation suggests that internal firm characteristics and governance structures may help explain why some banks disclose sustainability information more extensively and credibly than others.

This study therefore focuses on three antecedent variables: profitability, leverage, and institutional ownership. Profitability reflects internal financial capacity and may encourage firms to disclose more sustainability information as a positive signal to the market (Gunawan and Sjarief, 2022; Masyitoh and Indrabudiman, 2024). Leverage may either encourage disclosure through creditor pressure and legitimacy concerns or constrain it, because heavily indebted firms must prioritize debt obligations (Hermawan and Sutarti, 2021; De Ruijter, 2024). Institutional ownership is widely associated with stronger monitoring and better governance, but its net effect on voluntary non-financial disclosure remains theoretically ambiguous, since institutional investors may also prioritize financial efficiency and stability over expanded disclosure (Sanjaya et al., 2024; Nugrahani and Artanto, 2022).

Prior studies have produced inconsistent findings regarding the effects of profitability, leverage, and institutional ownership on sustainability disclosure, as well as the consequences of disclosure for firm value. The present study extends this literature in three specific ways relative to the closest prior work. First, whereas Masyitoh and Indrabudiman (2024) and Hermawan and Sutarti (2021) test financial characteristics as direct determinants of ESG or sustainability disclosure, this study

repositions sustainability disclosure as a mediating mechanism linking those characteristics to firm value and tests all direct and indirect paths simultaneously. Second, whereas most Indonesian evidence pools non-financial firms or uses company size as a moderator (Indana et al., 2024; Sanjaya et al., 2024), this study isolates the banking sector—an industry with naturally high leverage, capital-adequacy regulation, and a strategic role in sustainable finance—over the post-POJK 51 period of 2021–2024. Third, rather than relying on a generic disclosure index, sustainability disclosure is measured through content analysis of a banking-adjusted checklist built on the GRI G4 Financial Services Sector Disclosures, focusing on 12 voluntary financial-services (FS) indicators that vary meaningfully across banks. The novelty of this study thus lies in its examination of voluntary sustainability disclosure, measured through a banking-adjusted GRI checklist, as a simultaneous mediating mechanism between profitability, leverage, institutional ownership, and firm value in Indonesian banking companies.

2. Literature review

Signaling Theory

Signaling theory, introduced by Spence (1973), explains how firms reduce information asymmetry by voluntarily disclosing strategic information to the market. In this context, profitability, leverage, and institutional ownership may function as underlying conditions that shape sustainability-disclosure decisions, while high-quality sustainability disclosure itself can serve as a credible signal of good governance, long-term commitment, and effective ESG risk management, thereby improving market confidence and firm value (Gunawan and Sjarief, 2022; Sanjaya et al., 2024). Signaling theory primarily underpins the antecedents-to-disclosure paths (H1–H3) and the

disclosure-to-value path (H4), together with the mediation logic in H8–H10.

Agency Theory

Agency theory emphasizes the contractual relationship between principals and agents and the information asymmetry that may arise between them (Jensen and Meckling, 1976; Healy and Palepu, 2001). Sustainability disclosure can reduce agency costs by improving transparency and allowing shareholders and other stakeholders to evaluate management not only on financial performance but also on environmental, social, and governance dimensions. Agency theory principally motivates the governance-and-value paths (H5–H7): institutional ownership functions as an external monitoring mechanism, and the market prices the resulting reduction in agency costs and information asymmetry into firm valuation. Because monitoring may be exercised either through pressure for disclosure or directly through constraints on managerial discretion, institutional ownership is expected to affect firm value both directly and indirectly through disclosure.

Profitability and Sustainability Disclosure

Profitability reflects a firm's ability to generate earnings from its assets and operations. Firms with stronger profitability are generally assumed to have greater financial flexibility and stronger incentives to disclose sustainability information as part of strategic reputation-building. However, prior evidence is mixed; some studies report positive effects, whereas others find negative or insignificant relationships (Hermawan and Sutarti, 2021; Yustin and Suhendah, 2023; Vastuvica and Ayu 2024).

H1: Profitability has an effect on sustainability disclosure in banking companies listed on the IDX during 2021–2024.

Leverage and Sustainability Disclosure

Leverage represents the extent to which firms rely on debt financing. From a signaling and legitimacy perspective, highly leveraged firms may increase sustainability disclosure to reassure creditors and reduce perceived risk. Alternatively, leverage may limit the resources available for deeper disclosure and sustainability initiatives, and heavily indebted firms may become more conservative in releasing discretionary information. The relationship is therefore theoretically ambiguous and empirically contextual (Masyitoh and Indrabudiman, 2024; Hermawan and Sutarti, 2021; De Ruijter, 2024).

H2: Leverage has an effect on sustainability disclosure in banking companies listed on the IDX during 2021–2024.

Institutional Ownership and Sustainability Disclosure

Institutional ownership represents the proportion of shares held by institutional investors. Institutional investors usually have stronger monitoring capacity, longer investment horizons, and greater concern for corporate accountability, which may pressure management to provide broader and more credible sustainability disclosure. At the same time, institutional investors may prioritize financial efficiency, stability, and risk control over the expansion of voluntary non-financial reporting, so the direction of the effect is not settled a priori (Sanjaya et al., 2024; Nugrahani and Artanto, 2022; Indana et al., 2024).

H3: Institutional ownership has an effect on sustainability disclosure in banking companies listed on the IDX during 2021–2024.

Sustainability Disclosure and Firm Value

Sustainability disclosure is viewed in this study as voluntary disclosure that communicates a firm's economic, social,

and environmental performance to stakeholders. Prior research suggests that such disclosure can improve legitimacy, reduce information asymmetry, strengthen investor confidence, and ultimately enhance firm value, especially in highly regulated sectors such as banking (Masyitoh and Indrabudiman, 2024; An et al., 2025; Desai et al., 2025).

H4: Sustainability disclosure has an effect on firm value.

Antecedents and Firm Value (Direct Effects)

Beyond their influence on disclosure, the three antecedents may also affect firm value directly. Profitability is a fundamental value driver that the market prices through expected future cash flows (An et al., 2025). Leverage may affect value through its risk and tax implications, although in the banking sector—where high leverage is structural and governed by capital-adequacy regulation—its direct valuation effect is uncertain. Institutional ownership may raise value by reducing agency costs through monitoring, or may be perceived by the market as constraining managerial flexibility, again yielding an ambiguous predicted sign (Jensen and Meckling, 1976; Sanjaya et al., 2024).

H5: Profitability has an effect on firm value.

H6: Leverage has an effect on firm value.

H7: Institutional ownership has an effect on firm value.

The Mediating Role of Sustainability Disclosure

Integrating signaling and agency perspectives, sustainability disclosure is expected to serve as a channel through which internal financial and governance characteristics are transmitted to firm value. Antecedents that shape the depth and credibility of disclosure may therefore influence valuation indirectly, in addition to any direct effect.

H8: Sustainability disclosure mediates the effect of profitability on firm value.
H9: Sustainability disclosure mediates the effect of leverage on firm value.

H10: Sustainability disclosure mediates the effect of institutional ownership on firm value.

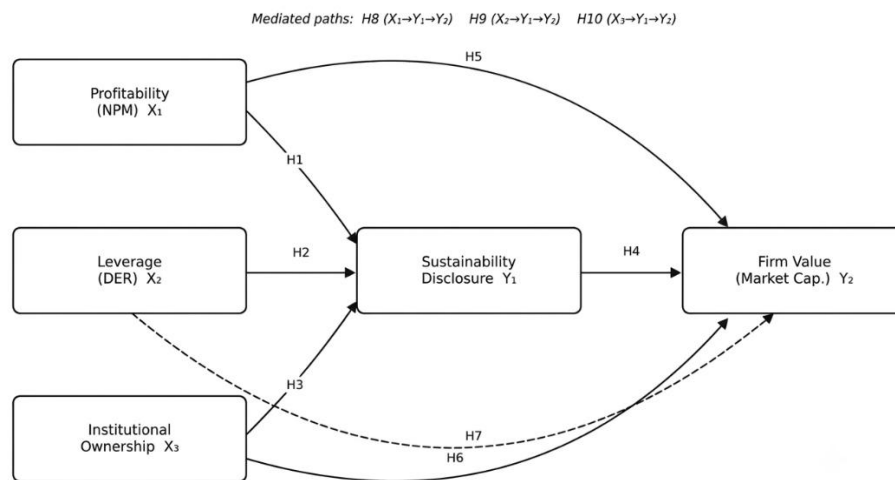


Figure 1. Conceptual framework

3. Research method

Research design, population, and sample

This study employs a quantitative, explanatory (causal) design using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The population consists of all 46 banking companies listed on the Indonesia Stock Exchange (IDX) during 2021–2024. The sample was selected through purposive sampling, applying the inclusion criteria summarized in Table 1. Firms were retained if they

were continuously listed throughout 2021–2024, consecutively published both annual reports and sustainability reports over the period, and had complete data for all study variables. This procedure yielded a final sample of 34 banking companies and, over the four-year observation window, 136 firm-year observations. The study uses secondary data hand-collected from annual reports, sustainability reports, and related corporate disclosures published by the IDX and the companies' official websites.

Table 1. Sample selection procedure

No.	Sampling Criterion	Excluded	Remaining
	Banking companies listed on the IDX (population, 2021–2024)	—	46
1	Continuously listed on the IDX throughout 2021–2024	(0)	46
2	Consecutively published annual and sustainability reports over the period	(12)	34
3	Complete data for all research variables	(0)	34
	Final sample (firms)		34
	Firm-year observations (34 firms × 4 years)		136

Source: Compiled by the authors, 2026.

Variable operationalization

The independent variables are profitability, leverage, and institutional ownership; sustainability disclosure serves as the mediating variable; and firm value is the dependent variable. Each construct is a

single, directly observable (manifest) indicator with a clear operational definition drawn from prior literature. The measurement of each variable, its proxy, formula, scale, and supporting citation is summarized in Table 2.

Table 2. Operationalization of variables

Variable	Proxy	Measurement	Scale	Source
Profitability (X ₁)	Net Profit Margin (NPM)	Net profit after tax ÷ operating income	Ratio	Anis et al. (2023)
Leverage (X ₂)	Debt-to-Equity Ratio (DER)	Total liabilities ÷ total equity	Ratio	Gunawan and Sjarief (2022)
Institutional Ownership (X ₃)	Institutional ownership relative to firm size	Shares held by institutions ÷ ln(total assets)	Ratio	Sanjaya et al. (2024)
Sustainability Disclosure (Y ₁)	Voluntary GRI disclosure index (VSRDI)	Mean quality score of 12 voluntary FS indicators (FS1, FS2, FS3, FS5, FS6, FS7, FS8, FS9, FS10, FS11, FS13, FS14), each scored 0/25/50/75/100	Ratio (0–1)	GRI (2021); Kurniawati (2025)
Firm Value (Y ₂)	Market capitalization (ln)	ln(year-end closing price × shares outstanding)	Ratio	Wahyono et al. (2024)

Source: Compiled by the authors, 2026.

Sustainability disclosure is measured through content analysis of each bank's sustainability report against a checklist adapted from the GRI Standards, specifically the GRI G4 Financial Services Sector Disclosures. From an initial checklist of 30 indicators spanning general, economic, environmental, and social topics, 12 financial-services (FS) indicators were classified as *voluntary*—that is, beyond minimum compliance—because they are not uniformly reported by all banks and exhibit genuine variation across firms and periods. Each voluntary indicator is scored on a graded 0–25–50–75–100 scale (0 = not disclosed; 25 = very minimal; 50 = general; 75 = relatively complete and partly quantified; 100 =

complete, quantified, and accompanied by clear targets or policies). The scores are averaged across the 12 indicators to form the voluntary sustainability-reporting disclosure index (VSRDI) for each firm-year. Coding was performed manually by a single trained coder; to mitigate single-coder bias, a written scoring rubric with anchored descriptors was applied consistently, and ambiguous cases were re-reviewed against the rubric before a final score was assigned.

Data analysis technique

Data were analyzed using SEM-PLS in SmartPLS, which is appropriate for simultaneously testing complex direct and indirect (mediation) relationships and does

not require multivariate normality. Because every construct in the model is operationalized as a single manifest indicator (single-indicator construct), the measurement (outer) model evaluation typically applied to multi-indicator reflective constructs—convergent validity (outer loadings, AVE), discriminant validity (Fornell–Larcker, HTMT), and internal-consistency reliability (composite reliability, Cronbach's alpha)—is not applicable, since there are no inter-indicator relationships within a construct to evaluate. For single-indicator constructs, the loading is fixed at 1.0 and analysis proceeds directly to the structural (inner) model.

The structural model was evaluated using the coefficient of determination (R^2 and adjusted R^2), interpreted following Chin (1998) as strong (0.67), moderate (0.33), or weak (0.19), and the sign and magnitude of the path coefficients. Statistical significance of the direct and specific indirect (mediation) effects was assessed through nonparametric bootstrapping in SmartPLS. A relationship is considered significant at the 5% level when the t-statistic exceeds 1.96 and the p-value is below 0.05 (two-tailed). Mediation was classified following the logic that a significant indirect effect combined with a non-significant direct effect indicates full (indirect-only)

mediation, whereas significance of both paths indicates partial mediation.

4. Result and discussion

Results

The final sample comprises 34 banks representing a heterogeneous cross-section of the Indonesian banking industry—conventional commercial banks, Islamic banks, regional development banks, and digital banks—observed over four years (2021–2024), for 136 firm-year observations. This heterogeneity provides adequate variation for testing the structural relationships in the model.

Descriptive statistics

Table 3 summarizes the distribution of the study variables. Profitability (NPM) shows a wide range, indicating substantial variation in earnings performance across banks, while leverage (DER) and institutional ownership (Inst_size) reveal differing funding and ownership structures. Sustainability disclosure (GRI_VOL) has a mean index of 0.671 with values ranging from 0.25 to 0.98, confirming that voluntary disclosure practices are not yet standardized across the sector. Firm value (ln market capitalization) also varies widely across firms and years. Because PLS-SEM is robust to departures from normality, the non-normal distribution of some variables does not compromise estimation.

Table 3. Descriptive statistics of research variables (N = 136)

Variable	Mean	Median	Minimum	Maximum	Std. Dev.
Profitability (NPM)	−0.002	0.210	−4.790	0.850	0.926
Leverage (DER)	0.049	0.050	0.000	0.150	0.032
Institutional Ownership (Inst_size)	0.041	0.040	0.020	0.060	0.010
Sustainability Disclosure (GRI_VOL)	0.671	0.750	0.250	0.980	0.226
Firm Value (ln Market Cap.)	16.592	16.480	13.790	20.900	1.659

Measurement model

As explained in Section 3.3, all five constructs are single-indicator manifest variables; consequently, convergent- and discriminant-validity and internal-consistency reliability tests are not applicable, and the analysis proceeds directly to the structural model.

Coefficient of determination (R^2). Table 4 reports the explanatory power of the model. The exogenous variables and the mediator jointly explain 26.2% of the variance in firm value ($R^2 = 0.262$; adjusted $R^2 = 0.240$), while the three antecedents explain 10.8% of the variance in sustainability disclosure ($R^2 = 0.108$; adjusted $R^2 = 0.087$). Following Chin (1998), the model is weak-to-approaching-moderate for firm value and weak for disclosure, which is common in social, financial, and sustainability research where behavior is shaped by many factors outside the model. Accordingly, interpretation emphasizes the direction and significance

of the relationships rather than overall predictive strength.

Table 4. Coefficient of determination (R^2)

Endogenous Construct	R^2	Adjusted R^2
Firm Value	0.262	0.240
Sustainability Disclosure	0.108	0.087

Path coefficients

Table 5 presents the standardized path coefficients from the PLS algorithm. Sustainability disclosure has the largest coefficient on firm value (0.392), followed by profitability (0.135). Both leverage (−0.214) and institutional ownership (−0.273) load negatively on sustainability disclosure, and both also carry negative coefficients on firm value (−0.078 and −0.176, respectively). Profitability's coefficient on disclosure is negligible (0.020).

Table 5. Path coefficients

Path	Firm Value	Sustainability Disclosure
Profitability	0.135	0.020
Leverage	−0.078	−0.214
Institutional Ownership	−0.176	−0.273
Sustainability Disclosure	0.392	—

Hypothesis testing (bootstrapping)

Table 6 reports the bootstrapped t-statistics, p-values, and hypothesis

decisions for all direct and specific indirect effects. Figure 2 displays the final structural model with bootstrap t-values.

Table 6. Hypothesis testing: Direct and specific indirect effects

Path (Hypothesis)	β	t-stat	p-value	Decision
Profitability $\rightarrow$ Sustainability Disclosure (H1)	0.020	0.228	0.819	Not supported
Leverage $\rightarrow$ Sustainability Disclosure (H2)	-0.214	2.873	0.004	Supported
Institutional Ownership $\rightarrow$ Sustainability Disclosure (H3)	-0.273	3.226	0.001	Supported
Sustainability Disclosure $\rightarrow$ Firm Value (H4)	0.392	7.941	0.000	Supported
Profitability $\rightarrow$ Firm Value (H5)	0.135	3.345	0.001	Supported
Leverage $\rightarrow$ Firm Value (H6)	-0.078	1.266	0.206	Not supported
Institutional Ownership $\rightarrow$ Firm Value (H7)	-0.176	2.000	0.046	Supported
Profitability $\rightarrow$ Disclosure $\rightarrow$ Firm Value (H8)	0.008	0.227	0.820	Not supported
Leverage $\rightarrow$ Disclosure $\rightarrow$ Firm Value (H9)	-0.084	2.605	0.009	Supported
Institutional Ownership $\rightarrow$ Disclosure $\rightarrow$ Firm Value (H10)	-0.107	3.094	0.002	Supported

Significance at $t > 1.96$ and $p < 0.05$ (two-tailed).

Relationship	Result
Profitability $\rightarrow$ Sustainability Disclosure	Not significant
Leverage $\rightarrow$ Sustainability Disclosure	Significant
Institutional Ownership $\rightarrow$ Sustainability Disclosure	Significant
Sustainability Disclosure $\rightarrow$ Firm Value	Significant
Profitability $\rightarrow$ Firm Value	Significant
Leverage $\rightarrow$ Firm Value	Not significant
Institutional Ownership $\rightarrow$ Firm Value	Significant
Profitability $\rightarrow$ Sustainability Disclosure $\rightarrow$ Firm Value	Not significant mediation
Leverage $\rightarrow$ Sustainability Disclosure $\rightarrow$ Firm Value	Significant full mediation
Institutional Ownership $\rightarrow$ Sustainability Disclosure $\rightarrow$ Firm Value	Significant partial mediation

Figure 2. Structural model with bootstrap t-values

Of the ten hypotheses, seven are supported (H2, H3, H4, H5, H7, H9, H10) and three are not (H1, H6, H8). Sustainability disclosure fully mediates the leverage–firm value relationship (significant indirect effect, non-significant

direct effect) and partially mediates the institutional ownership–firm value relationship (both paths significant), but does not mediate the profitability–firm value relationship.

Discussion

The insignificant effect of profitability on sustainability disclosure (H1; $\beta = 0.020$, $p = 0.819$) indicates that stronger earnings performance does not automatically lead banks to disclose more sustainability information. A banking-specific explanation is that bank profitability is driven largely by macroprudential and monetary conditions—net interest margins, loan-loss provisioning, and policy rates—that are only loosely connected to discretionary ESG-reporting budgets, unlike in manufacturing or extractive sectors where profitability more directly funds reputational disclosure. This aligns with evidence that profitability does not consistently determine sustainability-reporting intensity (Hermawan and Sutarti, 2021; Vastuvica and Ayu 2024). By contrast, profitability significantly affects firm value directly (H5; $\beta = 0.135$, $p = 0.001$), confirming that the market continues to price earnings fundamentals; consistent with the non-significant mediation in H8 ($p = 0.820$), this effect operates directly rather than through disclosure.

Leverage significantly affects sustainability disclosure (H2; $\beta = -0.214$, $p = 0.004$), and the negative sign indicates that more highly leveraged banks disclose less voluntary sustainability information. This finding is best read within the regulatory context of bank capital structure, which differs fundamentally from that of non-financial firms. Because banking leverage is structurally high and governed by capital-adequacy regulation (Basel III and OJK capital rules), elevated leverage signals binding financial pressure and risk-management priorities rather than a legitimacy motive to expand discretionary reporting, prompting more conservative voluntary disclosure. Leverage does not directly affect firm value (H6; $\beta = -0.078$, $p = 0.206$), but the mediation test (H9; indirect $\beta = -0.084$, $p = 0.009$) shows that sustainability

disclosure fully transmits leverage's effect to firm value. In other words, leverage influences valuation only through the disclosure channel—supporting both signaling and agency theory by positioning disclosure as an accountability and risk-communication mechanism.

Institutional ownership significantly affects both sustainability disclosure (H3; $\beta = -0.273$, $p = 0.001$) and firm value (H7; $\beta = -0.176$, $p = 0.046$), with sustainability disclosure partially mediating the relationship (H10; indirect $\beta = -0.107$, $p = 0.002$). The consistently negative signs suggest that, in the Indonesian banking context, institutional investors are oriented more toward financial efficiency, stability, and risk control than toward the expansion of voluntary non-financial reporting, and that concentrated institutional ownership may be perceived by the market as constraining managerial flexibility. Institutional ownership therefore influences firm value through two channels—directly, and indirectly through its dampening effect on voluntary disclosure. This nuances the common assumption that institutional monitoring uniformly promotes broader ESG communication (Sanjaya et al., 2024; Nugrahani and Artanto, 2022).

Finally, sustainability disclosure exerts the strongest effect in the model on firm value (H4; $\beta = 0.392$, $p < 0.001$; the largest path coefficient and highest t-statistic, 7.941). The market increasingly interprets voluntary sustainability information as a positive signal of governance quality, long-term commitment, and resilience in the banking sector, consistent with prior evidence that ESG-related disclosure strengthens valuation and stakeholder trust (An et al., 2025; Desai et al., 2025; Masyitoh and Indrabudiman, 2024). Taken together, the results confirm that sustainability disclosure has evolved into an important non-financial mechanism explaining how internal financial and governance characteristics translate into

firm value in Indonesian banking companies.

5. Conclusion

This study set out to examine how profitability, leverage, and institutional ownership shape sustainability disclosure and, in turn, firm value among Indonesian banking companies listed on the Indonesia Stock Exchange during 2021–2024. The results show that leverage and institutional ownership significantly and negatively affect sustainability disclosure, whereas profitability has no discernible effect. Sustainability disclosure, profitability, and institutional ownership significantly affect firm value, whereas leverage exerts no direct effect. Sustainability disclosure fully mediates the leverage–firm value relationship and partially mediates the institutional ownership–firm value relationship, confirming that it operates as a genuine transmission channel rather than a peripheral outcome.

Theoretically, these findings extend signaling and agency perspectives by demonstrating that sustainability disclosure functions as an accountability channel that converts internal financial and governance characteristics into market value, while the negative association between institutional ownership and disclosure qualifies the conventional agency-theory assumption that monitoring uniformly promotes voluntary reporting. Practically, bank management can enhance market valuation by expanding the depth and credibility of sustainability disclosure beyond minimum regulatory compliance, particularly among highly leveraged and institutionally concentrated banks. For regulators such as Indonesia's Financial Services Authority (OJK) and the Indonesian Institute of Accountants (IAI), the findings underscore the importance of strengthening the quality, not merely the incidence, of disclosure as PSPK 1 and PSPK 2 move toward mandatory implementation in 2027.

This study is subject to several limitations that suggest directions for future research. The sample is confined to Indonesian banks over a four-year period, the structural model explains only a modest share of variance in both endogenous constructs, each construct relies on a single manifest indicator, and the disclosure index was coded by a single rater. Future research should extend the analysis across sectors and countries, incorporate additional governance variables, employ multi-indicator constructs with reliability testing, and address potential endogeneity between disclosure and firm value through instrumental-variable or dynamic-panel approaches

References

- An, H., Ran, C., & Gao, Y. (2025). Does ESG information disclosure increase firm value? The mediation role of financing constraints in China. *Research in International Business and Finance*, 73, Part A, <https://www.sciencedirect.com/science/article/abs/pii/S0275531924003775>
- Anis, I., Gani, L., Fauzi, H., Hermawan, A. A., & Adhariani, D. (2023). The sustainability awareness of banking institutions in Indonesia, its implication on profitability by the mediating role of operational efficiency. *Asian Journal of Accounting Research*, 8(3), 265–282. <https://doi.org/10.1108/AJAR-06-2022-0179>
- Bursa Efek Indonesia. (2022). Laporan Keberlanjutan Emiten di Bursa Efek Indonesia Tahun 2022. Jakarta: IDX Press Release. <https://www.idx.co.id>
- Bursa Efek Indonesia. (2024). Siaran Pers: Peningkatan Laporan Keberlanjutan Emiten Tahun 2023. Jakarta: IDX Official Release. <https://www.idx.co.id>

- Chin, W. W. (1998). *The partial least squares approach to structural equation modeling*. In G. A. Marcoulides (Edition.), *Modern methods for business research*. Lawrence Erlbaum Associates.
- Desai, P., Chandwani, R., & Sinha, P. (2025). Green loan disclosures and bank market valuation: Unveiling the catalyst role of sustainable governance. *Managerial and Decision Economics*, 46(7), 3806-3819.
<https://doi.org/10.1002/mde.4557>
- De Ruijter, J. (2024). THE MODERATING EFFECT OF FIRM SIZE ON THE RELATIONSHIP BETWEEN ESG PERFORMANCE AND EARNINGS QUALITY. <https://arno.uvt.nl/show.cgi?fid=174679>
- Global Reporting Initiative. (2021). GRI Standards.
<https://www.globalreporting.org/standards/>
- Gunawan, V., & Sjarief, J. (2022). Analisis pengaruh profitabilitas, leverage, dan ukuran perusahaan terhadap pengungkapan sustainability report. *BALANCE: Jurnal Akuntansi, Auditing dan Keuangan*, 19(1), 22–41.
<https://doi.org/10.25170/balance.v19i1.3223>
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31(1–3), 405–440.
[https://doi.org/10.1016/S0165-4101\(01\)00018-0](https://doi.org/10.1016/S0165-4101(01)00018-0)
- Hermawan, T., & Sutarti, S. (2021). Pengaruh likuiditas, leverage, dan profitabilitas terhadap pengungkapan sustainability report. *JIAKES: Jurnal Ilmiah Akuntansi Kesatuan*, 9(3), 597–604.
<https://jurnal.ibik.ac.id/index.php/jiakes/article/view/1209>
- Hummel, K., & Schlick, C. (2016). The relationship between sustainability performance and sustainability disclosure—Reconciling voluntary disclosure theory and legitimacy theory. *Journal of Accounting and Public Policy*, 35(5), 455–476.
<https://doi.org/10.1016/j.jaccpubpo.2016.06.001>
- IDX Channel. (2025, January 22). BEI: 94 persen emiten sudah sampaikan laporan keberlanjutan. Retrieved from
<https://www.idxchannel.com/market-news/bei-94-persen-emiten-sudah-sampaikan-laporan-keberlanjutan>
- IFAC. (2025, May 12). More global companies seek assurance on sustainability reporting, study by IFAC, AICPA & CIMA shows. Retrieved from
<https://www.ifac.org/news-events/2025-05/more-global-companies-seek-assurance-sustainability-reporting-study-ifac-aicpa-cima-shows>
- Ikatan Akuntan Indonesia (IAI). (2024, December 2). IAI launches roadmap of Indonesian sustainability disclosure standards to achieve transparency and maintain national competitiveness. Retrieved from
https://web.iaiglobal.or.id/Berita-IAI/detail/iai_launches_roadmap_of_indonesian_sustainability_disclosure_standards_to_achieve_transparency_and_maintain_nationalcompetitiveness
- Ikatan Akuntan Indonesia (IAI). (2025a, July 1). DSK IAI sahkan standar pengungkapan keberlanjutan: PSPK 1 dan PSPK 2. Retrieved from
<https://web.iaiglobal.or.id/Berita->

- [IAI/detail/dsk_iai_sahkan_standar_pengungkapan_keberlanjutan_pspk_1_dan_pspk_2](https://web.iaiglobal.or.id/Berita-1-dan-pspk-2)
- Ikatan Akuntan Indonesia (IAI). (2025b, August 7). Indonesia launches sustainability disclosure standards based on IFRS S1 and S2. Retrieved from <https://web.iaiglobal.or.id/Berita-1-dan-pspk-2>
- Indana, D., Rini, I., & Pangestuti, I. R. D. (2024). Analysis of financial characteristics of sustainability report: Company size as moderating variable. *Research Horizon*, 4(4), 197–204. <https://journal.lifescifi.com/index.php/RH/article/view/324>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kurniawati, A. D. (2025). Revealing sustainability performance: A content analysis of sustainability reporting from Big Four Indonesian banking institutions. *Proceedings of the 12th Gadjah Mada International Conference on Economics and Business (GAMAICEB 2024)*. Atlantis Press
- Maryana., & Carolina, Y. (2021). The impact of firm size, leverage, firm age, media visibility and profitability on sustainability report disclosure. *Jurnal Keuangan dan Perbankan*, 25(1), 36–47. <https://doi.org/10.26905/jkdp.v25i1.4941>
- Masyitoh, F. F., & Indrabudiman, A. (2024). Effects of profitability, liquidity, and leverage on environmental, social & governance (ESG) disclosures with company size as a moderation variable. *Jurnal Disrupsi Bisnis*, 7(2), 329–343. <https://doi.org/10.32493/drj.v7i2.37724>
- Nugrahani, T. S., & Artanto, Y. (2022). Analisis faktor pengungkapan laporan keberlanjutan di Indonesia. *Universitas PGRI Yogyakarta Business and Management Journal*, 2(2), 40–54. <https://journal.upy.ac.id/index.php/ubmj/article/view/4981>
- Otoritas Jasa Keuangan (OJK). (2023). Roadmap Keuangan Berkelanjutan Tahap II (2021–2025). Jakarta: OJK.
- Sanjaya, G. D., Dewi, N. W. Y., & Atmaja, I. M. D. (2024). Pengaruh profitabilitas, leverage, kepemilikan institusional, dan ukuran dewan direksi terhadap pengungkapan kinerja keberlanjutan pada perusahaan perbankan BEI tahun 2018–2022. *Jurnal Ilmiah Mahasiswa Akuntansi*, 15(1), 955–968. <https://doi.org/10.23887/jimat.v15i04.76707>
- Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87(3), 355–374. <https://doi.org/10.2307/1882010>
- Vastuvica, V., & Ayu, S. D. (2024). Dampak disclosure sustainability report terhadap profitabilitas perusahaan industri dasar dan kimia. *Jurnal Ilmiah Wahana Akuntansi*, 18(2), 164–181. <https://doi.org/10.21009/10.21009/10.21009/wahana.18.022>
- Wahyono, W., Laga, A., Kurniawati, R., Sari, D. R., Mukharudfa, M., Kusumastuti, R., & Putra, W. E. (2024). ESG rating and firm value in emerging market: Investigating the mediating role of financial performance. *Asian Journal of Applied Business and Management*, 3(2), 1–15. <https://doi.org/10.55927/ajabm.v3i4.12442>

Yustin, M., & Suhendah, R. (2023). The effect of profitability, risk, and company age on ESG disclosure. *International Journal of*

Application on Economics and Business, 1(1), 151–161.
<https://doi.org/10.24912/ijaeb.v1i1.151-161>