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Financial Transparency as a Strengthening Effect of Corporate Social Responsibility Disclosure on Corporate Financing Constraints in the Context of Digital Transformation

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Abstract

In the digital transformation era, companies face increasing challenges in securing external financing amid growing demands for sustainable and accountable business practices. Corporate social responsibility (CSR) disclosure is expected to enhance stakeholder confidence and potentially reduce corporate financing constraints; however, its effectiveness may depend on the transparency of firms' financial information. This study examines the effect of CSR disclosure on corporate financing constraints and evaluates the moderating role of financial transparency. The study used panel data from manufacturing companies listed on the Indonesia Stock Exchange, with the sample selected through purposive sampling. The final sample comprised 17 companies and 68 firm-year observations. Data were analyzed using panel data regression with EViews. The findings indicate that CSR disclosure has no significant effect on corporate financing constraints in the digital transformation era. Financial transparency also does not significantly moderate the relationship between CSR disclosure and corporate financing constraints, suggesting that it neither strengthens nor weakens the influence of CSR disclosure on firms' access to funding. These results demonstrate that CSR disclosure alone may be insufficient to reduce financing constraints or improve corporate access to external capital. The study contributes to the literature by clarifying the limited role of CSR disclosure and financial transparency in explaining financing constraints among Indonesian manufacturing companies. Practically, companies should place greater emphasis on the quality of financial information, financial performance stability, and substantive governance practices, rather than relying solely on social disclosure, to strengthen investor and creditor confidence in corporate financing decisions.

Keywords: Corporate Financing Constraints; Corporate Social Responsibility Disclosure; Digital Transformation; Financial Transparency; Indonesia Stock Exchange

INTRODUCTION

Today, companies have easy access to external financing (Xiang et al., 2022)(Kokot-Stępień, 2022). However, this depends not only on a company's financial performance but also on the quality of information provided to the market. Companies often struggle to secure external funding due to high costs. This is due to several factors, such as information asymmetry, agency problems, weak governance, or uncertainty about future performance. These difficulties can limit a company's ability to invest, innovate, and maintain long-term growth. In such situations, disclosure practices have become crucial for companies. By disclosing clear and accurate information, companies can demonstrate their credibility, reduce uncertainty, and build investor confidence. Full disclosure of information can reduce market information asymmetry during transactions, enabling companies to build investor confidence and gain public recognition (Albuquerque et al., 2019)

Companies are increasingly paying attention to Corporate Social Responsibility, or CSR. This reporting practice reflects a company's commitment to social, environmental, and governance responsibilities (Nguyen et al., 2023; Sebrina et al., 2023). According to Li et al., 2018 By disclosing CSR information, companies provide stakeholders with a broader picture of their values, ethical behavior, sustainability risks, and long-term strategic plans. Corporate Social Responsibility (CSR) refers to a company’s voluntary commitment to consider social and environmental aspects in its core business activities (Fauzi & Rasyid, 2025). In broad terms, financing constraints refer to the difficulties companies face in securing capital from available funding sources. More specifically, they describe the challenges companies encounter when trying to obtain funds from external sources (Islah, 2021)

Bae et al., (2019) The study found that CSR helps reduce market share losses among highly leveraged firms. By limiting harmful responses from customers and competitors, CSR enables these firms to retain their customer base and defend themselves against aggressive competitive actions. Many studies have previously suggested that CSR disclosure can reduce the information asymmetry between managers and external parties, as it demonstrates a company's accountability and improves the quality of information about the company. If investors and creditors believe that CSR disclosure is credible, they are likely to perceive a company as lower risk, more legitimate, and more sustainable in the long term, thus making it easier for the company to obtain financing. Honest and transparent CSR disclosure is crucial for companies to build trust with stakeholders.

However, the link between CSR disclosure and corporate financing constraints is not always clear or direct. CSR disclosure can alleviate financing constraints when supported by credible, consistent, and transparent information. Companies can tap external sources at higher costs if they cannot meet their funding needs internally. However, the high cost of external financing and limited access to debt often lead companies to miss out on investment opportunities (Zhang et al., 2019). Conversely, if CSR disclosure is merely symbolic, incomplete, or difficult to verify, external stakeholders may perceive it as image management rather than genuine accountability. This can undermine the expected benefits of CSR disclosure, especially in markets where investors are increasingly sensitive to greenwashing, opportunistic reporting, and inconsistent sustainability claims. Therefore, the effectiveness of CSR disclosure in alleviating financing constraints depends on the extent to which such disclosure is accompanied by financial transparency.

CSR disclosure can help alleviate financing constraints if the information is credible, consistent, and transparent. The problem is, if CSR disclosure is merely symbolic, incomplete, or difficult to verify, external stakeholders may be skeptical. They may view it as an attempt at image management rather than genuine accountability. If a company has low financial transparency, good CSR disclosure can provide the market with more non-financial information and reduce information asymmetry (Dhaliwal et al., 2012)

This situation undermines the intended benefits of CSR disclosure, especially in a market where investors are increasingly wary of greenwashing practices, opportunistic reporting, and inconsistent sustainability claims. Therefore, the effectiveness of CSR disclosure in alleviating financing constraints depends heavily on financial transparency. Therefore, CSR disclosure must be supported by clear and reliable financial information. In this way, CSR disclosure can help reduce a company's financing constraints.

Financial transparency is crucial for strengthening the effectiveness of CSR disclosure in addressing financing constraints. Financial transparency means companies must provide clear, reliable, timely, and easily accessible financial information. Companies with good financial transparency typically provide accurate and understandable information to all relevant parties about the company's finances, risks, management practices, and future plans. When companies report CSR transparently, all parties can better assess whether the company's sustainability activities are financially realistic, integrated with the company's strategy, and aligned with the company's performance. In this way, financial transparency makes CSR disclosures more credible and more effective in reducing financing constraints.

Financial transparency is crucial in the era of digital transformation. Companies now have new ways to collect, process, and distribute information to stakeholders. By using digital reporting systems, integrated databases, and technology.

METHODS

This study applies a quantitative approach to analyze the relationship between variables and explain the causal effect proposed in the research hypotheses. Specifically, this study examines the effect of Corporate Social Responsibility disclosure as the independent variable on corporate financing constraints as the dependent variable, with financial transparency serving as a moderating variable in the context of digital transformation. The population consists of 171 manufacturing companies listed on the Indonesia Stock Exchange during the 2019 to 2022 period. Based on the established sampling criteria, 17 companies were selected as the research sample. Therefore, this study obtained 68 observations for each variable, calculated from 17 companies observed over four years.

1. Corporate Financing Contraints

This study applies firm size and firm age to estimate financing constraints, then develops a financing constraint variable using the SA index as proposed by Li et al. (2020). The SA index indicates that financially constrained firms show significant cash-to-cash flow sensitivity. This index measures financing constraints using only two indicators, namely company size and company age, as explained by Liu et al. (2019). The formula used is as follows :

$$SA = -0.737*Size + 0.043*Size^2 – 0.04*Age \quad (1)$$

2. Corporate Social Responsibility

Corporate Social Responsibility reporting is included in the company's annual report according to the Global Reporting Initiative (GRI) version 4. In this research, CSR disclosure is assessed through the CSRI proxy, with indicators derived from the Global Reporting Initiative. The formula used is as follows. The GRI has standard reporting principles that can be applied by companies within the reporting framework. The disclosure indicators include 91 items in total, covering economic, environmental, and social aspects. The formula used is as follows (Ratnasari & Meita, 2017). These indicators cover environmental, social, and economic aspects. The scoring criteria assign a value of 1 when CSR disclosure information is presented in the report and a value of 0 when such information is not provided. The formula used is :

$$CSRI_j = \frac{\sum X_{ij}}{n} \quad (2)$$

3. Financial Transparency

Financial transparency in this study was measured using the earnings management approach (Dhaliwal et al., 2011). This measurement is based on the idea that the higher the earnings management practices, the lower the level of transparency in a company's financial reports. Conversely, the lower the earnings management practices, the more transparent the financial reports are considered because the information presented more accurately reflects the actual financial condition. The formula is :

$$\frac{TAC_{i.t}}{TA_{i,t-1}} = \beta_0 \frac{1}{TA_{i,t-1}} + \beta_1 \frac{\Delta Sales_{i,t} - \Delta AR_{i,t}}{TA_{i,t-1}} + \beta_2 \frac{PPE_{i,t}}{TA_{i,t-1}} + \varepsilon_{i,t} \quad (3)$$

4. Type of Research

The quantitative approach in this study is causal, analyzing the influence of one or more variables on other variables and the causal relationships between variables explained by hypotheses. Hypothesis testing is a learning process that demonstrates the nature of a particular relationship or the differences between individuals and their relationship to several situational factors (Sekaran, 2016).

This study examines how the independent variables, namely green governance structure and CSR disclosure, affect corporate financial constraints as the dependent variable, with equity balance and financial transparency acting as moderating variables.

5. Data Analysis Technique

Explain the data analysis technique used in accordance with the research approach and objectives. For quantitative studies, authors should specify the statistical analysis or analytical model used, including supporting software where relevant. For qualitative studies, authors should explain the stages of data analysis, such as data reduction, data display, coding, categorization, interpretation of findings, or thematic analysis. For mixed-methods studies, authors should explain how quantitative and qualitative analyses are integrated proportionally.

RESULTS

1. Research Findings

a. Descriptive Statistical Analysis

The results of the descriptive statistical analysis are presented in Table 1, Descriptive Statistics Results.

Table 1. Descriptive Statistics Results

Descriptive Statistics	FC	CSR	FT
Mean	5.216886	0.221235	−0.004160
Maximum	17.238280	0.725275	0.012038
Minimum	−3.623391	0.032967	−0.130160
Standard Deviation	7.770754	0.158337	0.021088
Observations	68	68	68

Source: Processed data (2026).

The results presented in Table 1, Descriptive Statistics Results, can be described as follows.

1) Corporate Financing Constraints

Table 1, Descriptive Statistics Results, shows that the Corporate Financing Constraints (FC) variable has a mean value of 5.216886. The maximum value of 17.238280 was recorded by PT Waskita Beton Precast Tbk (WSBP) in 2019, while the minimum value of −3.623391 was recorded by PT Astra International Tbk (ASII) in 2021. The standard deviation of 7.770754 is greater than the mean value, indicating considerable variation in corporate financing constraints across the sampled companies and observation periods.

2) Corporate Social Responsibility Disclosure

The Corporate Social Responsibility (CSR) disclosure variable presented in Table 1, Descriptive Statistics Results, has a mean value of 0.221235. The maximum value of 0.725275 was recorded by PT Charoen Pokphand Indonesia Tbk (CPIN) in 2020. Compared with the other observations, this value indicates a relatively high level of CSR disclosure during that period. Meanwhile, the minimum value of 0.032967 was recorded by PT Japfa Comfeed Indonesia Tbk (JPFA) in 2020 and 2022, indicating a relatively low level of CSR disclosure. The standard deviation of 0.158337 shows that CSR disclosure levels varied across the sampled companies and observation years.

3) Financial Transparency

Table 1, Descriptive Statistics Results, also shows that the Financial Transparency (FT) variable has a mean value of −0.004160. The maximum value of 0.012038 was recorded by PT Japfa Comfeed Indonesia Tbk (JPFA) in 2019, indicating a relatively high value of financial transparency compared with the other observations. Conversely, the minimum value of −0.130160 was recorded by PT Wijaya Karya Beton Tbk (WTON) in 2022, indicating a relatively low value of financial transparency. The standard deviation of 0.021088 suggests that the level of financial transparency differed across the sampled companies and observation periods.

b. Normality Test

The results of the residual normality test are illustrated in Figure 1, Normality Test Results.

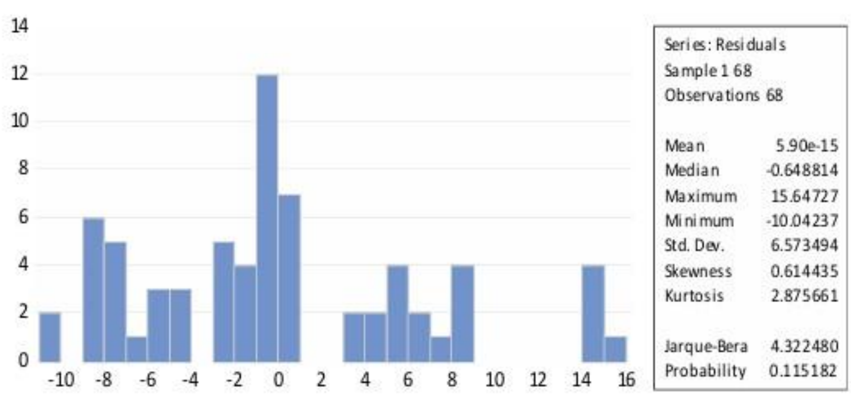

Figure 1. Normality Test Results

Source: Processed data (2026).

Figure 1, Normality Test Results, shows that the Jarque–Bera statistic is 4.322480 with a probability value of 0.115182. The Jarque–Bera test is used to determine whether the regression residuals follow a normal distribution (Jarque & Bera, 1987). Because the probability value of 0.115182 is greater than the significance level of 0.05, the null hypothesis of normally distributed residuals cannot be rejected. Therefore, the residuals of the regression model can be considered normally distributed, and the model satisfies the normality assumption.

c. Heteroscedasticity Test

The results of the heteroscedasticity test are presented in Table 2, Results of the Glejser Heteroscedasticity Test.

Table 2. Results of the Glejser Heteroscedasticity Test

Heteroskedasticity Test: Glejser
Null hypothesis: Homoskedasticity

F-statistic	1.539610	Prob. F(4,63)	0.2016
Obs*R-squared	6.055283	Prob. Chi-Square(4)	0.1951
Scaled explained SS	7.370213	Prob. Chi-Square(4)	0.1176

Source: Processed data (2026).

Table 2, Results of the Glejser Heteroscedasticity Test, shows that the probability value of the Obs*R-squared chi-square statistic is 0.1951. The Glejser test is used to determine whether the variance of the regression residuals differs across observations (Glejser, 1969; Gujarati & Porter, 2009). Because the probability value of 0.1951 is greater than the significance level of 0.05, the null hypothesis of homoscedasticity cannot be rejected. Accordingly, the regression model does not indicate a heteroscedasticity problem.

d. Panel Data Regression Model Selection

Panel data regression can generally be estimated using three models, namely the Common Effect Model, Fixed Effect Model, and Random Effect Model. The selection of the appropriate model is necessary to ensure that the estimation results accurately reflect the characteristics of the companies and observation periods (Baltagi, 2021; Wooldridge, 2010). The model-selection process in this study was conducted using the Chow test and the Hausman test.

1) Chow Test

The results of the Chow test are presented in Table 3, Chow Test Results.

Table 3. Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2891.245810	(16,47)	0.0000
Cross-section Chi-square	468.717157	16	0.0000

Source: Processed data (2026).

Table 3, Chow Test Results, shows that the probability value of the cross-section chi-square statistic is 0.0000. The Chow test is used to determine whether the Common Effect Model or Fixed Effect Model is more appropriate for panel data estimation. A probability value lower than 0.05 indicates that the Fixed Effect Model should be selected, whereas a probability value greater than 0.05 supports the Common Effect Model. Because the probability value of 0.0000 is lower than the significance level of 0.05, the null hypothesis supporting the Common Effect Model is rejected. Therefore, the Fixed Effect Model is more appropriate than the Common Effect Model. The model-selection process was subsequently continued using the Hausman test.

2) Hausman Test

The results of the Hausman test are presented in Table 4, Hausman Test Results.

Table 4. Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.955790	4	0.0115

Source: Processed data (2026).

Table 4, Hausman Test Results, shows that the probability value of the cross-section random statistic is 0.0115. The Hausman test is used to determine whether the Fixed Effect Model or Random Effect Model provides a more consistent panel data estimation (Hausman, 1978; Wooldridge, 2010). A probability value lower than 0.05 indicates that the Fixed Effect Model should be selected, while a probability value greater than 0.05 supports the Random Effect Model. Because the probability value of 0.0115 is lower than the significance level of

0.05, the null hypothesis supporting the Random Effect Model is rejected. Therefore, the Hausman test confirms that the Fixed Effect Model is the most appropriate model for this study.

Based on Table 3, Chow Test Results, and Table 4, Hausman Test Results, the panel data regression analysis in this study was estimated using the Fixed Effect Model. This model was selected because it can accommodate unobserved characteristics that differ across companies but remain relatively constant throughout the observation period.

3) Panel Data Regression Analysis

The results of the panel data regression analysis using the Fixed Effect Model are presented in Table 5, Panel Data Regression Test Results.

Table 5. Panel Data Regression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.724544	0.711230	5.236766	0.0000
CSR	0.285017	0.795902	0.358106	0.7219
FT	2.149593	1.820379	1.180849	0.2436

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.960569	0.825385	3.586894	0.0008
CSR	0.206880	0.786083	0.263178	0.7936
FT	8.921306	7.995884	1.115737	0.2705
CSR*FT	-44.06729	50.00554	-0.881248	0.3829

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.999427	Mean dependent var	5.216886
Adjusted R-squared	0.999146	S.D. dependent var	7.770754
S.E. of regression	0.227021	Akaike info criterion	0.136076
Sum squared resid	2.319231	Schwarz criterion	0.886791
Log likelihood	18.37343	Hannan-Quinn criter.	0.433532
F-statistic	3566.136	Durbin-Watson stat	2.447262
Prob(F-statistic)	0.000000		

Source: Data Processed Results, 2026

Source: Processed data (2026).

The results presented in Table 5, Panel Data Regression Test Results, can be interpreted through the following components.

a) Regression Coefficient

The regression coefficient indicates the direction of the relationship between each independent variable and Corporate Financing Constraints. A positive coefficient indicates that an increase in the independent variable is associated with an increase in Corporate

Financing Constraints. Conversely, a negative coefficient indicates that an increase in the independent variable is associated with a decrease in Corporate Financing Constraints.

b) Partial Significance Test

The probability value of the t-statistic is used to determine whether each independent variable has a statistically significant effect on Corporate Financing Constraints. A probability value lower than 0.05 indicates that the independent variable has a statistically significant effect. Conversely, a probability value greater than 0.05 indicates that the independent variable does not have a statistically significant effect.

c) Coefficient of Determination

The R-squared value presented in Table 5, Panel Data Regression Test Results, indicates the proportion of variation in Corporate Financing Constraints that can be explained by Corporate Social Responsibility disclosure and Financial Transparency. The remaining variation is explained by other variables that are not included in the regression model.

d) Simultaneous Significance Test

The probability value of the F-statistic is used to determine whether Corporate Social Responsibility disclosure and Financial Transparency simultaneously have a statistically significant effect on Corporate Financing Constraints. A probability value lower than 0.05 indicates that the independent variables collectively have a significant effect on the dependent variable.

e) Regression Model Conclusion

The specific effects of Corporate Social Responsibility disclosure and Financial Transparency on Corporate Financing Constraints should be determined based on the regression coefficients, t-statistics, probability values, R-squared value, and F-statistic probability reported in Table 5, Panel Data Regression Test Results.

DISCUSSION

1. The Effect of Corporate Social Responsibility Disclosure on Corporate Financing Constraints

The hypothesis testing results show that Corporate Social Responsibility (CSR) disclosure has a positive but statistically insignificant effect on corporate financing constraints, with a t-statistic of 0.358106 and a probability value of 0.7219. Since the probability value is greater than the 0.05 significance level, the hypothesis proposing that higher CSR disclosure reduces corporate financing constraints is not supported. Thus, the findings indicate that variations in CSR disclosure among the sampled companies are not sufficient to explain differences in their financing constraints.

This result suggests that CSR disclosure may not yet serve as a primary consideration for investors and creditors when assessing a company's access to external financing. Although CSR disclosure provides information about a company's social, environmental, and governance responsibilities, financing decisions may still depend more strongly on financial fundamentals, business risk, profitability, liquidity, leverage, creditworthiness, and other governance-related factors. Consequently, a higher level of CSR disclosure does not automatically reduce the financing constraints experienced by a company.

The findings differ from Zhai et al. (2022), who argued that corporate social responsibility can help reduce financing constraints, lower financing costs, improve access to external funding, and alleviate financial pressure. The results are also not consistent with Dhaliwal et al. (2012), who demonstrated that CSR disclosure may provide additional information to capital market participants and contribute to a reduction in financing-related information asymmetry. From this perspective, CSR disclosure is expected to signal corporate accountability and long-term sustainability, thereby increasing stakeholder confidence.

However, the insignificant result found in this study indicates that the effectiveness of CSR disclosure may depend on its quality, consistency, comparability, and credibility rather than merely on the number of items disclosed (Khuong et al., 2022; Pang et al., 2025; Soobaroyen et al., 2023). The relatively low average CSR disclosure score of 0.221235 also indicates that the level of disclosure among the sampled companies remains limited and varies considerably. Under such conditions, CSR information may not provide sufficiently strong signals for investors and creditors to revise their assessment of corporate financing risk. In addition, differences in the depth and quality of disclosure across companies may reduce the ability of CSR information to function as an effective mechanism for reducing information asymmetry.

Theoretically, this finding contributes to the literature by showing that the relationship between CSR disclosure and financing constraints is not necessarily direct or universal. The expected benefits of CSR disclosure may depend on the institutional environment, the credibility of corporate reporting, stakeholder responses, and the extent to which sustainability information is integrated into financing decisions. Therefore, the findings provide evidence that CSR disclosure alone may be insufficient to reduce corporate financing constraints, particularly when the disclosure does not provide a sufficiently strong and credible signal to capital providers.

From a practical perspective, companies should not rely solely on increasing the quantity of CSR information disclosed in annual or sustainability reports. Companies need to improve the quality, relevance, consistency, and credibility of CSR information and integrate sustainability practices with financial performance and corporate strategy. For investors and creditors, the findings suggest that CSR disclosure should be evaluated together with financial performance, governance quality, risk management, and other indicators when assessing a company's financing capacity.

2. The Moderating Role of Financial Transparency in the Relationship Between Corporate Social Responsibility Disclosure and Corporate Financing Constraints

The hypothesis testing results show that the interaction between CSR disclosure and financial transparency has a negative but statistically insignificant effect on corporate financing constraints. The interaction term produced a t-statistic of -0.881248 and a probability value of 0.3829. Since the probability value is greater than 0.05, the hypothesis stating that financial transparency moderates the relationship between CSR disclosure and corporate financing constraints is not supported. Therefore, financial transparency has not been empirically demonstrated to significantly strengthen or weaken the effect of CSR disclosure on corporate financing constraints in the sampled companies.

The negative direction of the interaction coefficient indicates a tendency for higher financial transparency to strengthen the expected reduction in financing constraints associated with CSR disclosure. However, because the relationship is statistically insignificant, this tendency cannot be considered conclusive. The result implies that financial transparency, as measured in this study, is not sufficiently strong to change the relationship between CSR disclosure and corporate financing constraints.

This finding differs from the argument of Dhaliwal et al. (2012), who explained that high-quality non-financial disclosure can provide additional information to market participants and reduce information asymmetry, particularly when other sources of corporate information are limited. Similarly, Attia & Almoneef (2025) suggested that credible corporate responsibility practices can improve stakeholder confidence, reduce perceived risk, and potentially facilitate access to external financing. Based on these arguments, financial transparency should theoretically enhance the credibility of CSR disclosure because stakeholders can evaluate whether corporate sustainability commitments are consistent with the company's financial condition and performance (Y. Liu et al., 2023; Wild & Wild, 2023).

Nevertheless, the insignificant moderating effect found in this study indicates that the combination of CSR disclosure and financial transparency has not become a decisive factor in explaining financing constraints among the sampled Indonesian manufacturing companies. One possible explanation is that investors and creditors may prioritize other information when making financing decisions, such as profitability, cash flow, leverage, company size, collateral, business prospects, and overall financial risk. Consequently, even when companies provide CSR information and relatively transparent financial reporting, these factors may not be sufficient to substantially influence access to external financing.

Another possible explanation concerns the measurement of financial transparency. In this study, financial transparency is proxied using an earnings management approach. Although this approach reflects the extent to which reported earnings may deviate from underlying economic performance, it may not fully capture all dimensions of financial transparency, such as the timeliness, accessibility, completeness, comparability, and digital availability of corporate financial information. Therefore, the measurement used may only represent one aspect of the broader concept of financial transparency.

From a theoretical perspective, these findings indicate that financial transparency does not automatically enhance the effectiveness of CSR disclosure in reducing financing constraints. The credibility of corporate information may be influenced by multiple mechanisms simultaneously, and the interaction between financial and non-financial disclosure may depend on reporting quality, corporate governance, regulatory conditions, and stakeholders' ability to process the disclosed information. Thus, the study extends the literature by demonstrating that the moderating role of financial transparency may be context-dependent rather than universally significant.

From a practical perspective, companies should develop a more integrated disclosure strategy. Improving CSR disclosure without strengthening the overall quality of financial reporting and corporate governance may not substantially improve access to financing.

Similarly, financial transparency should not be limited to reducing earnings management but should also include timely, consistent, accessible, and reliable disclosure of information. In the context of digital transformation, companies can utilize integrated reporting systems and digital disclosure platforms to improve the accessibility and credibility of both financial and sustainability information.

Overall, the findings demonstrate that CSR disclosure and financial transparency, either independently or interactively, have not been shown to significantly influence corporate financing constraints in the sample examined. These findings contribute to the corporate finance and sustainability disclosure literature by indicating that increased information disclosure does not necessarily translate directly into easier access to financing. The effectiveness of disclosure may depend on its quality, credibility, relevance to financing decisions, and interaction with companies' financial fundamentals and governance practices.

The study also has several limitations that should be considered when interpreting the findings. First, the sample consists of only 17 manufacturing companies with 68 firm-year observations during the 2019–2022 period, which limits the generalizability of the results to other sectors and longer observation periods. Second, CSR disclosure is measured using a disclosure index that primarily captures whether particular items are disclosed and may not fully reflect the quality, depth, or credibility of the information presented. Third, financial transparency is proxied through an earnings management approach, which may not capture all dimensions of financial transparency. Fourth, corporate financing constraints may also be influenced by other factors that are not included in the research model, such as profitability, leverage, liquidity, corporate governance quality, macroeconomic conditions, and the level of corporate digitalization.

Future research should therefore involve a larger sample, a longer observation period, and companies from multiple industrial sectors. Further studies may also incorporate additional measures of financial transparency, CSR disclosure quality, digital reporting quality, ESG integration, and corporate governance mechanisms. These developments may provide a more comprehensive explanation of how corporate disclosure practices influence financing constraints in the context of digital transformation.

CONCLUSION

This study examines the effect of Corporate Social Responsibility (CSR) disclosure on corporate financing constraints and the moderating role of Financial Transparency in the context of digital transformation. The findings show that CSR disclosure does not have a significant effect on corporate financing constraints, and Financial Transparency is also unable to significantly moderate the relationship between CSR disclosure and financing constraints. These results indicate that, in the era of digital transformation where information is more widely accessible and disseminated, CSR disclosure and financial transparency have not yet become key determinants in influencing companies' financing constraints in Indonesia.

This study contributes to the literature on corporate finance by providing empirical evidence from an emerging market experiencing digital transformation. Theoretically, the findings extend prior research by indicating that the expected role of CSR and financial transparency in reducing financing constraints may be weakened in a digital environment, where information availability is high but not always a primary consideration in financing decisions. Practically, the study highlights that despite the advancement of digital information systems, CSR disclosure and financial transparency alone are not sufficient to significantly influence financing constraints, suggesting that financial fundamentals and governance quality remain more influential factors.

For future research, it is recommended to incorporate additional variables such as digital financial reporting quality, the level of digital adoption, ESG integration maturity, and corporate governance mechanisms to better explain financing constraints in the digital era. Further studies may also explore the role of digital platforms, big data analytics, and real-time disclosure systems in shaping investor responses to CSR and financial transparency. In addition, comparative research across countries with varying levels of digital infrastructure and regulatory environments could provide deeper insights into how digital transformation reshapes the relationship between CSR disclosure, transparency, and corporate financing constraints.

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