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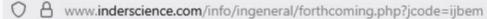
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 Access to and use of financial services for household investment: a micro-analytical evidence from Nigeria

by Akinwumi Sharimakin

Abstract: The study respectively examined the impact of access to and use of financial services on household investment. A micro-level data across cross-sectional 2,184 households in southwestern Nigeria were used to evaluate the relationship between investment and access to and use of financial services. Analysis of data by double hurdle and probit model respectively showed that household investment pattern conformed with the life-cycle hypothesis, and that household investment are associated with formal, semi-formal and informal financial services. Household who use (saved and/or borrowed) financial services invested more than those having mere access to such financial institutions. Results further showed that households that saved or/and borrowed from formal financial institutions are better investors, and that investment are majorly constrained by supply-side barriers. Policy effort at reducing barriers to access and use of financial services should include strategy at resolving demand-side barriers as this would improve financial stability of household to use financial services and substantially enhance household investment. Keywords: household investment; financial services; Nigeria; physical asset; financial asset.

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· CSR disclosure, politically connected supervisory board and cost of debt financing: evidence from Indonesia

by Joni Joni, Aurora Angela, Enny Prayogo, Maria Natalia, Oktavianti Oktavianti, Sinta Setiana, Tan Ming Kuang, Yunita Christy

Abstract: We examine the effect of corporate social responsibility (CSR) disclosure on the cost of debt financing (COD) in an emerging market, Indonesia. Next, the moderating effect of political relations through a connected supervisory board (PC-SVB) is investigated in this association. The paper uses all Indonesian listed companies as our population, and the final sample is 1,886 observations. Moderated regression analysis is applied to investigate the moderating effect of political relations on the association between CSR and cost of debt. Also, we address the endogeneity problem by using the generalised method of moments (GMM). We find that firms with more CSR disclosure have lower costs of debt financing in Indonesia. It means that CSR is valuable from the perspective of creditors or lenders. Additionally, the relationship is stronger in the presence of politically connected supervisory boards.

Keywords: corporate social responsibility; CSR; cost of debt; COD; politically connected supervisory boards; PC-SVB; emerging market; Indonesia.

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CSR disclosure, politically connected supervisory board and cost of debt financing: evidence from Indonesia

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1 Introduction

The objective of this paper is to investigate the effect of non-financial disclosure, and corporate social responsibility on the cost of debt in an emerging market, Indonesia, from 2015–2019. In the past few decades, corporate social responsibility has been an increasingly important concept for businesses and society around the world (e.g., Panait et al., 2022; Marínez et al., 2022; Kordsachia, 2020; Kallab and Salloum, 2017). CSR, as one non-financial disclosure, is an innovative idea to fulfil the increasing demand from stakeholders (La Rosa et al., 2018). Creditors consider CSR disclosure an extra report in forming credit decisions (Xu et al., 2021). Recently, the trend has shown that creditors use non-financial information, including CSR, to make investment and credit decisions reflected in the cost of debt financing (e.g., Dyck et al., 2019). Their decision making is not only limited to financial reports but more to environmental and social disclosure. From creditors' perspective, the risks and benefits of CSR disclosure can be measured by the cost of debt capital. For instance, companies with better implementation of corporate social responsibility might have lower costs of debt financing. This means that companies

have more benefits and are less risky when they become more socially responsible companies in the view of creditors.

We specifically explore the economic consequences of CSR disclosure from the perspective of creditors. Debt financing is an important capital structure because debt markets are larger than equity markets all around the world (Goss and Roberts, 2011). And it is also considered due to the preferable fund allocation in Indonesia, which use more debt than equity funds. Therefore, capital structure in developing countries is different compared to developed countries. For instance, listed companies in the USA use at least 70% of equity to fund their operation, whereas less than 60% of Chinese listed firms use equity (Yeh et al., 2020). Next, companies use debt capital to finance their operation due to tax reduction and monitoring improvement. In our case, the cost of debt capital is observed by calculating the proportion of interest expenses divided by the average of liabilities (Halling et al., 2020). Firms with lower costs of debt capital directly relate to sufficient cash flow (Gong et al., 2020). However, firms obtaining capital from creditors can cause credit risk and agency problems. Therefore, CSR is an important vehicle for creditors to evaluate the creditworthiness of a company as reflected in the observed cost of debt. It is expected that firms with more CSR activities experience lower costs of debt capital.

There is growing literature focusing on the association between CSR and the cost of debt in developed markets. Kordsachia (2020), for instance, examines and finds a negative association between CSR and marginal credit costs of European companies. This study also contributes to the risk management literature by showing that the insurance-like property of CSR is related to financial distress. La Rosa et al. (2018) test the effect of corporate social performance on cost of debt during financial crisis. Using a European sample, they show that non-financial firms with higher corporate social performance obtain lower interest rates and higher debt ratings.

In the context of developing countries, Gong et al. (2020) explore the impact of penalties issued by Chinese securities regulators on cost of debt and using CSR as a moderating variable. The study finds that CSR activity is reducing the increased cost of debt due to the penalties. Also, they report that the reputation effect of CSR is stronger in state-owned enterprises in weak law enforcement and low transparency environments. Moreover, Yeh et al. (2020) recently examined the moderating effect of state-owned enterprises (SOEs) on the association between CSR and cost of capital. In emerging economies, political connections have been strongly related to the awareness of conducting CSR policies. Their finding shows that CSR is negatively associated with the cost of capital. However, the moderating effect of the political connection is not statistically significant. While many empirical studies focus on developed markets, the limited study examines the association between CSR and the cost of capital in an emerging market where law enforcement is weak and the level of political connection is high.

Our study contributes to the literature in several different ways. First, our study examines the moderating effect of political connection in the relationship between CSR activity and cost of debt capital. Since Indonesian corporate governance is strongly influenced by politics (Joni et al., 2019), exploring how political connections contribute to this association is interesting. Previous studies focus mostly on Chinese-listed firms and show inconclusive results on the effect of political connections in the association between CSR activity and the cost of debt. Joni et al. (2019) report that more than 30% of listed firms in Indonesia have connections with the government which is reflected in the

number of political boards in the company. Our study clearly contributes to corporate governance development, especially the role of politically connected boards. Second, we examine the association in the context of the emerging market, which implements a dual board system. The dual board system in Indonesia promotes the strategic role of a supervisory board with political connections that can help companies to reduce the cost of debt capital (Joni et al., 2019). Third, we contribute to the development of CSR practices in the view of creditors. Fourth, we apply the generalised method of moments (GMM) approach is used to address the endogeneity issue. In corporate governance literature, the endogeneity problem will result in bias in the estimation and might cause conflicting empirical findings. We believe that mixed results or inconclusive results in prior literature due to this issue.

The remainder of the paper is structured as follows: in Section 2, we review several key theories and develop the hypotheses, followed by research design in Section 3. Next, the result and the conclusion will be discussed in Sections 4 and 5.

2 Key theories and hypotheses development

Several key theories have been used to explain the effect of CSR activity and cost of debt, including agency theory, stakeholder theory, and reputation theory. Agency theory is proposed by Jensen and Meckling (1976). In the perspective of agency theory, corporate governance mechanism (e.g., Salloum et al., 2019) and CSR disclosure (e.g., Kordsachia, 2020) can be a vehicle to address agency conflicts between top management and various stakeholders. CSR disclosure can be a conflict resolution to reduce the agency conflict and information asymmetry. When firms implement more CSR disclosure, it indicates better CSR commitments. Therefore, it is expected to lower agency conflict and information asymmetry between agent and principal. Specifically, companies with more CSR disclosure can improve their transparency in the view of investors and creditors as reflected in lower cost of debt.

In line with agency theory, stakeholder theory focuses on the accountability of the firms towards different types of stakeholders with various interests (Freeman, 2010). CSR activity is an essential tool to fulfil the different interests of different stakeholders. Stakeholder theory perceives that CSR can lower the cost of debt capital because several dimensions of CSR lower information asymmetry and nurture stakeholders' needs (Ge and Liu, 2015). When firms actively promote CSR activities through their disclosure, it can attract qualified employees, prevent government penalties, improve supplier loyalty, and costumer's satisfaction. Additionally, firms with more CSR concerns can increase foreign market expansion (Sayah et al., 2020). As a complementary, we apply reputation theory to improve our understanding of the effect of CSR activities and the cost of debt. Reputation theory forecasts that excellent credit histories of the firms or their good reputation will lead to lower interest rates over time (Diamond, 1989). Firms with more CSR activities create better corporate reputations, which can lower the cost of debt capital of the company.

Prior studies have examined the association between CSR disclosure and cost of debt capital in developed and developing markets. In the context of European economy, Kordsachia (2020) tests the effect of CSR activity on marginal credit costs based on 778 European listed firms or 2,117 observations in the period of 2014 to 2017. This study

provides a specific sample of the European context in the analysis and addresses mixed results on the relationship between CSR and the cost of debt. They show that CSR is positively perceived by creditors as reflected in lower cost of debt. Also, firms with more CSR commitments are stronger in financial distress conditions. Additionally, they provide evidence on the importance of board characteristics in credit markets. Eliwa et al. (2019) examine whether firms with better environmental, social, and governance (ESG) have lower costs of debt based on 15 European Union countries from 2005 to 2016. Using 6,018 firm-year observations, they find that creditors value both ESG performance and disclosure. They use ESG information for credit decision-making. This means that firms with stronger ESG performance and disclosure have a lower cost of debt. Next, they report that the effect of ESG performance and disclosure on the cost of debt is more dominant in stakeholder-oriented countries. La Rosa et al. (2018) investigated the association between corporate social performance and the cost of debt from 2005-2012 based on European countries. Their study focuses on the financial crisis period and measures the cost of debt using the interest rate and debt rating. Using 1,228 observations, they find that firms with higher social corporate performance experience a lower cost of debt. The association is weaker during the financial crisis period due to the profit orientation of the creditors.

Using European and US samples from 2015 to 2019, Martínez et al. (2022) examine whether firms with environmental and social concerns reduce their market risks. The result shows that companies with better CSR have lower volatility in the US market. However, the result is not consistent in the European context. Liu et al. (2015) investigate how CSR performance is related to the cost of new bond issues in the period 1992–2009. The sample comprises 4,260 new public bond issues. Using multiple regression analysis (OLS), they document that overall CSR performance is negatively associated with credit ratings and lower yield spreads based on new corporate bond issues. Their finding is consistent with the stakeholder theory. Also, they find that firms with higher CSR scores resulting lower bond yield spreads, while the CSR concern score is positively associated with bond yield spreads. In addition, using the number of covenants as a measure of the indirect cost of debt, they find that overall CSR performance is associated with less covenant intensity. Furthermore, Bhuiyan and Nguyen (2019) found similar results using 230 Australian-listed companies from 2004 to 2006.

While prior studies focus on developed markets, limited studies on developing countries where the concern of CSR implementation is growing. Empirical research on the association between CSR and the cost of debt in an emerging economy mostly focuses on the Chinese capital market that requires mandatory CSR disclosure (Fonseka et al., 2019; Gong et al., 2020; Xu et al., 2021; Yeh et al., 2020). For instance, Xu et al. (2021) examine the relationship between mandatory CSR disclosure and the cost of debt in China. They divided their data into two separate periods. The first data is from 2005-2008, which is called 'the pre-shock period', and the second data is from 2009–2012, which is named 'the post-adoption' when the mandatory policy was applied. The result of the study shows that after mandatory policy, firms obtain lower cost of debt and easier access to debt financing. Fonseka et al. (2019) investigated the association between environmental information disclosure (EID) and cost of debt (COD) in the setting of Chinese energy firms from 2008–2014. After checking the endogeneity issues, the study shows that EID is negatively associated with COD suggesting that creditors positively perceive Chinese energy firms with higher EID as reflecting lower COD. They also report that several types of energy products (wind, solar, hydropower, and oil) are

negatively related to COD. Then, they investigate a joint effect of EID and energy product types on COD. The finding reveals that only solar and wind power firms with higher levels of EID have a lower COD. When gas, thermal power generation, and hydro firms increase their EID level, the COD is significantly increasing.

Based on the theoretical background and the prediction of the empirical evidence, we propose the following hypothesis:

H1 A firm with higher corporate social responsibility activities is associated with a lower cost of debt, ceteris paribus.

The association between CSR disclosure and the cost of debt is influenced by political connections (Yeh et al., 2020). Based on resource dependency theory, firms with political connections experience more benefits, including easy access to capital. It is suggested that political connections can be a vehicle to lower the cost of debt. Several empirical studies show that the presence of political connections affects the relationship between CSR and the cost of debt. Gong et al. (2020) document that firms with political connections promote more CSR activities than their counterparts in China from 2017. Moreover, they show that CSR activity is pronounced in environments where law enforcement is weak and information transparency is low. In addition, Xu et al. (2021) show that CSR disclosure in China enhances political connections, which is significant for debt financing. Firms with mandatory CSR policies charge lower interest rates to creditors. Political connections contribute to debt financing in an informal way that bypasses the efficiency of the market. Politically connected firms have more access to debt financing without conforming to the regulations. Usually, they do not follow a transparent procedure in obtaining bank loans. In contrast, firms with fewer political connections are more market-oriented, and they show a certain level of transparency in accessing loans. Yeh et al. (2020) investigate how CSR affects a firm cost of equity and debt capital in China. They use a content analysis and develop a rating scale for CSR measurement, including corporate governance and ethical values, employment and employee equity protection, environmental protection, product quality control, protection of consumer equity, supply chain partnership, promotion of China's technological development, tax contribution, scientific responsibility management systems, and sound corporate image. The final sample is 662 Chinese firms from 2008–2011. Using Heckman's (1979) two-stage model, the result indicates that better CSR performance is associated with a lower cost of debt. However, they find that the moderating effect of state-owned enterprises as a proxy of political connection is not statistically significant.

In the context of dual board system in Indonesia, the role of politically connected supervisory is very strategic through their social status and network (Joni et al., 2019). It is expected that the presence of politically connected supervisory can improve the association between CSR and the cost of debt capital in Indonesia. Based on the theoretical background and the prediction of the empirical evidence, we propose the following hypothesis:

- H2a A firm with politically connected SBs experiences lower cost of debt, ceteris paribus.
- H2b Politically connected SBs influence the association between corporate social responsibility activity and cost of debt, ceteris paribus.

3 Research design

3.1 Data and sample

Our data consists of quantitative information from all publicly listed firms in the Indonesian Stock Exchange (IDX) during the period 2015–2019, except financial industries because they are under different regulations. We manually collected financial and corporate governance data, such as corporate social responsibility activities, political connections, board size, and other corporate governance data. We access all information from the published annual report of the company. If data is not available on the IDX website, we then search for the data from the company's website or Google search engine.

3.2 Models and variables

To examine the association between corporate social responsibility and cost of debt in Indonesia in Hypothesis 1, we initially run the following regression models (model 1).

$$\begin{split} COD_{acc_{it}} &= \alpha_{1}CSR_{disc_{it}} + \alpha_{2}PC_{sb_{it}} + \alpha_{3}LEV_{it} + \alpha_{4}FSIZE_{it} + \alpha_{5}INTCOV_{it} \\ &+ \alpha_{6}IND_{it} + \alpha_{7}YEAR_{it} + \epsilon_{it} \end{split}$$

Then, we investigate the effect of political connections on the relation between CSR activity and cost of debt in Hypothesis 2 by applying the following OLS regression models (model 2):

$$\begin{split} COD_{acc_{it}} &= \alpha_{1}CSR_{disc_{it}} + \alpha_{2}PC_{sb_{it}} + \alpha_{3}CSR*PC_{it} + \alpha_{4}LEV_{it} + \alpha_{5}FSIZE_{it} \\ &+ \alpha_{6}INTCOV_{it} + \alpha_{7}IND_{it} + \alpha_{8}YEAR_{it} + \epsilon_{it} \end{split}$$

We expect that a politically connected supervisory board can moderate the relationship between CSR disclosure and the cost of debt financing.

 Table 1
 Variable definitions

Variables	Definitions and references
COD_{acc}	The ratio of interest expense for firm i in year $t+1$ to average total liabilities in years t and $t+1$ (Bliss and Gul, 2012)
CSR_{disc}	The number of CSR components applied by firm i in year t divided by the total of 20 CSR components, including value-added information, environment, community, employee information, product and service information (Khan et al., 2014)
PC_{sb}	The percentage of politically connected supervisory board members for firm i in year t (Boubakri et al., 2008; Joni et al., 2019)
LEV	The natural log of the ratio of total long-term liabilities divided by the total assets for firm i in year t (Dhaliwal et al., 2006; Joni et al., 2019)
FSIZE	The natural log of assets for firm i in year t (Joni et al., 2019)
INTCOV	The ratio of operating income to interest expense for firm i in year t (Tran, 2014).
IND	A vector of industry indicator variables categorised based on two-digit Global Industry Classification Standard (GICS)
YEAR	A vector of year indicator variables, including 2015, 2016, 2017, 2018, and 2019.

A detailed definition of variables and references are outlined in Table 1.

3.3 Statistical analyses

To test the two hypotheses, we use ordinary least square (OLS) regression models. The first model examines the effect of CSR disclosure on the cost of debt financing using accounting measures. The second model investigates the influence of politically connected supervisory boards on the association between CSR disclosure and the cost of debt capital in Indonesia. We conduct the empirical analysis by applying several steps of quantitative analysis. First, we use descriptive statistics to comprehend the characteristics of our data for all main variables. Second, correlation analysis is applied to understand the relationships among main variables and to check the presence of multicollinearity problems. Another check is the variance inflation factor (VIF) which can test whether models suffer from multicollinearity. The last, our two main models are analysed by using the OLS regression model. The statistical analyses applied in our study are consistent with prior studies, such as Gong et al. (2020), Kordsachia (2020), Eliwa et al. (2019) and Yeh et al. (2020).

3.4 Sensitivity analyses

The main bias of the model estimations in corporate governance literature is the endogeneity problem. It is possible that firms with lower costs of debt capital might implement more CSR activities. And the association between CSR disclosure and cost of debt is due to latent variables that cannot be observed. So, this association can be endogenously determined. In our study, we address these potential problems by using the GMM, which is commonly applied in corporate governance literature and has shown powerful estimates in the presence of heteroskedasticity (Baum et al., 2003; Belsley et al., 2005).

4 Research findings

4.1 Descriptive statistics

In Table 2, we present descriptive statistics for the full sample of 1,886 firm-year observations and all variables to test the association between CSR and cost of debt capital. In dealing with raw data, we winsorised at the 1st and 99th percentiles for continuous variables except dummy variables. Table 2 reports the mean of several key variables, such as COD_{acc} (4.2%), CSR_{disc} (55%) and PC_{sb} (14.3%). All values are relevant and consistent with existing literature (e.g., Gong et al., 2020; Kordsachia, 2020; Xu et al., 2021). The statistics show that Indonesian-listed firms are aware of the importance of CSR disclosure. It is reflected in the average of the CSR_{disc} variable, suggesting that all listed companies disclose around 55% of CSR indicators in their annual report. Further, it indicates that many listed companies in Indonesia have political affiliations through supervisory board members (14.3%).

Additionally, we apply pairwise Pearson correlation to investigate the correlation among key variables in the models. However, we exclude indicator variables, such as industry and year effects. Table 3 shows that the highest correlation (r = 0.465) is

between CSR disclosure (CSR $_{disc}$) and Leverage (LEV). It is statistical significance at the 1% level. We further check for multicollinearity issues by reporting VIF values in Table 4. The results report that VIF values in all regression models are less than 10 (see Table 4), which indicates free from multicollinearity problem in both models.

 Table 2
 Summary statistics of main variables

Variable	N	Mean	St. dev	Min	Max
COD_{acc}	1,886	0.042	0.031	0.000	0.147
CSR_{disc}	1,886	0.555	0.257	0.000	0.900
PC_{sb}	1,886	0.143	0.281	0.000	1.000
LEV	1,886	0.708	0.390	0.000	0.960
FSIZE	1,886	22.247	9.146	2.607	32.921
INTCOV	1,886	29.111	154.57	-287.48	1,245.130

Notes: The table reports the summary statistics of the key variables. The sample includes 1,886 firm-year observations for the period 2015–2019. We use all variables based on the calendar year. The variable definitions are available in Table 1.

 Table 3
 Correlation matrix

		1	2	3	4	5	6
1	COD_{acc}	1.000					
2	CSR_{disc}	-0.062^{a}	1.000				
3	PC_{sb}	-0.086^{a}	0.142^{a}	1.000			
4	LEV	0.007	0.465^{a}	0.011	1.000		
5	FSIZE	-0.223^{a}	0.051^{b}	-0.005	0.022	1.000	
6	INTCOV	0.161 ^a	0.216^{a}	0.072^{a}	0.120^{a}	-0.147^{a}	1.000

Notes: The table reports the pairwise Pearson correlation matrix for the full sample (1,886 firm-year observations). Please see Table 1 for definitions of variables. The superscripts a—c indicate two-sided significance at the 1%, 5%, and 10% levels, respectively.

4.2 CSR and cost of debt capital

Table 4 shows the ordinary least squares (OLS) estimate for investigating the association between corporate social responsibility disclosure and cost of debt capital in model 1. The result indicates that the coefficient of CSR_{disc} is significantly negative at the 1% level (the coefficient = -0.007 and t = 2.51). The adjusted R^2 of model 1 is 14.7%. The main result is consistent with Hypothesis 1, suggesting that firms with more CSR disclosure obtain more benefits as reflected in lower cost of debt capital. From the perspective of creditors, CSR disclosure is valuable in credit decision-making. This is consistent with agency theory explaining that the presence of CSR disclosure improves corporate transparency and reduces information asymmetry in the Indonesian capital market. In the view of stakeholder theory, firms with better CSR disclosures obtain more rewards from creditors, as shown by the lower cost of debt. Further, the empirical result supports the reputation theory meaning that better credit history can result the lower cost of debt over a period of time due to their excellent reputation. The results are in line with prior studies (Fonseka et al., 2019; Gong et al., 2020; Xu et al., 2021; Yeh et al., 2020).

	Model 1	Model 2	
INTERCEPT	0.018^{a} (3.24)	$0.017^{a}(3.02)$	
CSRdisc	-0.007^{a} (2.51)	-0.006° (1.88)	
PC_{sb}	-0.008^{a} (3.46)	0.002 (0.37)	
CSR _{disc} * PC _{sb}	-	-0.018^{c} (1.72)	
LEV	0.012 ^a (6.19)	0.012 ^a (6.20)	
FSIZE	$0.000^{a} (4.23)$	0.000^a (4.30)	
INTCOV	-0.000^{a} (8.68)	-0.000^{a} (8.75)	
IND	Included	Included	
YEAR	Included	Included	
Average VIF	2.15	3.08	
Adj. R ²	0.147	0.148	
F	24.31	22.90	
Prob > F	$0.000^{\rm a}$	0.000^{a}	
N	1,886	1,886	

 Table 4
 CSR, politically connected SB, and cost of debt-pooled OLS

Note: The table reports OLS coefficient estimates, and indicator variables are included in the regression to control for year and industry-fixed effects. Model 1 examine the effect of CSR_{disc} on COD, and model 2 test the influence of politically connected SBs on the association between CSR_{disc} and COD. Please see Table 1 for definitions of variables. The superscripts a—c indicate two-sided significance at the 1%, 5%, and 10% levels, respectively.

4.3 CSR, politically connected SBs and cost of debt capital

Table 4 investigates the relationship between politically connected SBs and cost of debt in model 1. The result shows that firms with politically connected SBs result in lower cost of debt (the coefficient = -0.008 and t = 3.46). The result supports Hypothesis 2a, meaning that politically connected firms can access more loans with lower interest rates through their supervisory board connections. According to resource dependency theory, connections with government can be an effective tool to approach capital holders, such as creditors. Consequently, politically connected firms in Indonesia experience lower cost of debt.

To examine the role of politically connected SBs on the association between CSR and cost of debt, Table 4 reports the OLS estimates in model 2. The coefficient of interaction variable (CSR_{disc} * PC_{sb}) is negative at the moderate level (10%). A negative association between CSR and COD is stronger when firms have politically connected SBs. The statistical results are consistent with prior studies, such as Joni et al. (2019), Gong et al. (2020), Yeh et al. (2020) and Xu et al. (2021). Politically connected firms with CSR disclosure altogether improve corporate credibility resulting in lower cost of debt. Hypothesis 2b is supported. The results remain similar after controlling for endogeneity issues using the GMM model.¹

5 Conclusions

Our paper extends the literature by investigating the effect of CSR disclosure on cost of debt financing in Indonesia, as well as the moderating effect of politically connected SBs on this association. In Indonesia, bank financing is still a majority channel compared to stock financing. We contribute to the literature on CSR by demonstrating the positive effect of CSR disclosure on the cost of debt financing in Indonesia. This finding suggests that firms in emerging economies such as Indonesia can benefit from improving their CSR disclosure. Our results provide practical implications for firms seeking to lower their cost of debt financing and highlight the importance of CSR disclosure as a tool for achieving this goal.

We also show that in the context of Indonesia's dual board system, the relationship between CSR and COD is moderated by politically connected SBs. Our research shows that politically connected SBs can obtain a greater reduction in debt financing costs, indicating that political connections play a significant role in the relationship between CSR disclosure and debt financing costs. As a result, our research helps to clarify the role of political connections in shaping the impact of CSR on firm financing.

These findings have important implications for policymakers, investors, and firms operating in emerging economies. Policymakers should consider the potential benefits of promoting CSR disclosure in the credit market to encourage socially responsible practices and lower the cost of debt financing. Investors should consider the impact of political connections on the relationship between CSR disclosure and cost of debt financing when making investment decisions. For firms, our study highlights the importance of building political connections to effectively leverage the benefits of CSR disclosure in reducing the cost of debt financing. Future research can build on our findings by looking into the impact of CSR disclosure on other types of financing, such as equity financing, as well as the potential moderating effects of other factors like industry characteristics or regulatory environments.

However, the findings of this study should be considered in the light of several limitations that can provide opportunities for future research. Firstly, our study uses listed companies to address credit market implications without considering small-medium enterprises, which have more concerned with the credit market as their financing channel. Future studies might need to consider the effect of CSR and credit financing on small and medium enterprises. Secondly, this study will be beneficial if ESG reporting is added as an additional measure. However, our study cannot address this issue due to the availability of ESG data for the Indonesian market. ESG data is limited and available only for several large companies in Indonesian Stock Exchange. Thirdly, this paper focuses on CSR disclosures that have limitations in representing the substance of CSR commitment or corporate ethical behaviour. When the listed company does not disclose CSR, it does not mean that they do not implement it. Fourthly, the study only includes non-financial industries listed on the Indonesian Stock Exchange and excludes financial industries due to regulatory differences. This exclusion may limit the generalisability of the findings to the entire population of Indonesian firms, as the financial industry plays a significant role in the country's economy. Future studies may consider incorporating financial industries to better capture the overall impact of CSR on the cost of debt financing in Indonesia. Fifthly, the study relies solely on the annual reports of the companies to obtain the necessary data for the analysis. While annual reports provide a comprehensive overview of a company's financial performance and CSR activities, they

may not necessarily reflect the actual CSR practices and commitments of the firms. This limitation may result in potential biases and misinterpretation of the association between CSR disclosure and the cost of debt financing. Finally, the study focuses only on quantitative data and does not account for the qualitative aspects of CSR practices, such as the quality and effectiveness of CSR initiatives. Further research could complement the present study by including qualitative data to provide a more comprehensive analysis of the impact of CSR on the cost of debt financing.

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Notes

1 The results are not tabulated and can be provided upon request.