

## RESEARCH ARTICLE



# How does family business affect the association between corporate social responsibility disclosure and cost of debt in Indonesia?

Meilinda Sari<sup>1</sup> | Joni Joni<sup>2</sup> | Enda Karina Salsalina Br Ginting<sup>1</sup>

#### Correspondence

Joni Joni, Faculty of Business, Accounting Department, Universitas Kristen Maranatha Surva Sumantri No.65, Sukawarna, Kec. Sukajadi, Kota Bandung, Jawa Barat 40164, Indonesia.

Email: joni@eco.maranatha.edu

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## **Abstract**

This study examines how corporate social responsibility (CSR) disclosure and family firms affect the cost of debt (COD) using a sample of companies listed on the Indonesia Stock Exchange between 2017 and 2020. Ordinary least square regression was applied to investigate this association. This study also addresses the endogeneity problem using the generalized method of moments (GMM). This study finds that CSR lowers a company's COD. Firms with more CSR reporting minimize information asymmetry and improve their reputation. Next, we investigate whether family ownership can moderate the relationship between CSR and the COD. These findings support the hypothesis that family ownership moderates the relationship between CSR and COD. It is possible that family businesses use CSR to maintain a good reputation among their stakeholders, thus producing more CSR reports. The findings contribute to the literature by providing empirical evidence on how CSR and family firms experience a lower COD capital in the emerging economy context of Indonesia. Furthermore, this study provides academic implications by investigating whether family ownership can be a moderator variable in the association between CSR and COD. The study also has practical implications for practitioners and regulators in creating policies that promote better CSR initiatives and corporate governance systems.

## **KEYWORDS**

corporate social responsibility disclosure, cost of debt, emerging economies, family ownership

## INTRODUCTION

This study examines the relationship between corporate social responsibility (CSR) and cost of debt (COD) in companies listed on the Indonesia Stock Exchange (IDX) between 2017 and 2020. CSR activities have become an important part of business practice. CSR reporting is a commitment from the Limited Liability Company to participate in sustainable economic development to improve the quality of life and provide a beneficial environment for the company itself, the local community, and society in general. Elkington (1997) created the concept of the triple bottom line or "3P" (profit, people, and planet). If a

company intends to continue in the long term (sustainable), it must adhere to the triple bottom line "3P" concept, which states that the company must not only pursue revenue (profit), but also make a contribution to society (people) and adhere to environmental sustainability (planet).

CSR disclosures are considered additional reports that become one of the sources of information required by investors and creditors. It is regarded as a long-term value that can be addressed by stakeholders and shows the company's broad attitudes toward environmental, social, and governance issues (He, 2023). According to Wang et al. (2023), CSR information can help stock investors determine

<sup>&</sup>lt;sup>1</sup>Faculty of Business, Accounting Department, Universitas Kristen Maranatha, Bandung, Jawa Barat, Indonesia

<sup>&</sup>lt;sup>2</sup>Faculty of Business, Accounting Department, Universitas Kristen Maranatha, Kota Bandung, Jawa Barat, Indonesia

whether a company is a good investment target. Studies conducted by Guo et al. (2023) further state that CSR is an important issue for creditors.

Indonesian businesses must pay close attention to CSR because of the increasingly rapid development of the economy, technology, and global competition. There are several regulations on CSR reporting in Indonesia, including PP No. 47 of 2012 concerning Social and Environmental Responsibility of Limited Liability Companies, which is stated in Article 4 paragraph (1) of PP No. 47 of 2012, "Social and environmental responsibilities are carried out by the Board of Directors based on the Company's annual work plan after obtaining approval from the Board of Commissioners or the GMS in accordance with the articles of association of the Company, unless otherwise stipulated in the laws and regulations." Article 15b of Investment Law No. 25 of 2007 states that "every listed company is obliged to carry out corporate social responsibility."

Companies that consistently provide detailed CSR disclosure benefit from a variety of financial advantages, one of which is the lower COD (Ali et al., 2023; Duggal et al., 2024; Guo et al., 2023). CSR reporting is certainly more interesting because of increasing stakeholder demand, and the trend of CSR itself is increasing high (e.g., Guo et al., 2023). This increases the company's transparency and makes creditors more willing to provide capital to the company by lowering their interest costs. According to Uyar et al. (2023), CSR disclosure can reduce debt costs. From the agency theory perspective, CSR activities can avoid corporate risk by reducing information asymmetry. In this case, managers must be able to use increased CSR activities to disclose more information, make the company more transparent, and improve the company's image among stakeholders, especially investors and creditors (AlKhouri & Suwaidan, 2023; Cui et al., 2018). This is also consistent with signaling theory, which suggests that CSR disclosure is perceived as a positive signal by creditors and other stakeholders.

For several reasons, this study differs from previous studies (e.g. AlKhouri & Suwaidan, 2023; Duggal et al., 2024; Guo et al., 2023; Uyar et al., 2023). First, it extends a limited number of studies on how debtholders perceive CSR activities in developing countries. Most research on CSR and the COD has been conducted in developed countries, and there is still a paucity of literature examining this relationship in developing countries (e.g., AlKhouri & Suwaidan, 2023). This study is also practically important because debt is the main source of funding in emerging markets, such as Indonesia (Duggal et al., 2024).

Second, this study includes a moderating variable, family ownership, on the relationship between CSR disclosure and debt financing (e.g., Duggal et al., 2024). Another unique feature of the Indonesian Corporate Governance landscape is the presence of family firms. In Indonesia, the majority of listed companies are controlled by families (Joni et al., 2020). The ownership structure of companies in Indonesia differs from that of companies in other countries (Joni et al., 2020). Most businesses in Indonesia are concentrated, with the owner serving on the board of directors and as a manager.

According to Madden et al. (2020), family businesses are more likely to invest in CSR activities than nonfamily businesses.

Lim (2021), founders or founding families, and heirs control the majority of companies worldwide. Persistent family ownership is long-term loyalty to the company. However, if a company has a high percentage of family ownership, creditors and investors will be interested in investing in or providing funds to the company because the members of the company will perform optimally so that the company survives for a long time and is then passed down to its descendants. Consequently, this study anticipates that agency conflict with the COD will be reduced in family owned businesses, as it is impossible for family businesses to survive only in the short term.

Our study uses a sample of 2250 companies listed on the IDX for the 2017–2020 period. This study tested the effect of CSR on COD by including a moderating variable: family ownership. In accordance with our first hypothesis, our findings show that CSR has a negative effect on debt costs, consistent with previous studies. In the second test, our findings show that family ownership moderates the effect of CSR on debt costs. To ensure that the standard error of the estimates is consistent with heteroscedasticity and autocorrelation, an endogeneity test was performed using the generalized method of moments (GMM) heteroscedasticity technique (e.g., Joni et al., 2020). These results are consistent with the results of the main ordinary least square (OLS) regression estimations.

The remainder of this paper is organized as follows. Section goes over the theoretical foundation and hypothesis development. The third section covers the research methodology for the sample and variables used in this study. The fourth section presents the empirical findings of the research in the form of a descriptive analysis and explanations of the findings of this study. Finally, section is the study's conclusion.

# 2 | INSTITUTIONAL BACKGROUND, THEORETICAL FOUNDATION, AND HYPOTHESIS DEVELOPMENT

## 2.1 | Institutional background

The concept of CSR first appeared in the United States and Europe in 1970 and has since become one of the most interesting topics discussed by most researchers and businesspersons. In recent years, there has been a surge in public interest in CSR, which has sparked much discussion in the accounting and finance literature (Duggal et al., 2024; Hossain & Kryzanowski, 2021; Jannat et al., 2022). CSR performance is defined as a set of descriptive classifications of business activities with an emphasis on the impacts and outcomes for society, stakeholders, and the company itself (Bacha et al., 2021). CSR reporting demonstrates that companies incorporate social and environmental caring behaviors into their business operations and core strategies for interacting with their stakeholders. In recent years, the public has become increasingly aware of CSR reporting issues. CSR refers to going above and beyond what is required by law to serve the community and environment (Harjoto & Laksmana, 2018; Maury, 2022). In Indonesia, the government issued a CSR regulation,

PP No. 47 of 2012, concerning Social and Environmental Responsibility in Limited Liability Companies, in 2012. The issuance of this government regulation undoubtedly adds to the list of Indonesian CSR regulations. In addition, the law that governs CSR is Law No. 40 of 2007 concerning Limited Liability Companies Article 74, which states that it is related to regulating the obligation of Limited Liability Companies (PT) to carry out social and environmental responsibilities for the business activities carried out by the company.

Hossain and Kryzanowski (2021) described a CSR report as a business approach in which the goal is to respect ethics, people, society, and the environment as an integral strategy for improving a company's competitive position. By engaging in CSR reporting, the company has established and maintained positive relationships with all its stakeholders. Recently, Duggal et al. (2024) state that CSR is a strategic option that can have a variety of positive effects on the company, such as increasing stakeholder value, improving the company's reputation, and being one of the company's investments that can ensure the company's long-term sustainability. This is due to the fact that the value of care issued by the company to stakeholders is not solely for the benefit of the company, so it is beneficial for businesses to issue CSR reports.

The concept of CSR has gained legitimacy in Indonesia, and it is now being implemented by both state-owned and private companies (Selin et al., 2023). The current form of CSR is not just a moral responsibility. However, it has become a legal responsibility (liability) because CSR has been regulated by existing laws, both corporate and human rights.

## 2.2 | Theory and hypothesis development

Several related theories, including agency and signaling theories, can explain the relationship between CSR and debt costs. According to agency theory, there are two interconnected parties in a business: the agent and principal (Jensen & Meckling, 2019). The agent is the company's manager, who oversees the company's operational activities, whereas the principal is the party who will provide funds to the company. In this case, the investor (principal) must be able to hold management (agent) accountable for the funds provided to the company. This indicates that companies that disclose CSR will entice investors and creditors to invest their capital in the company because they can be held accountable for the capital provided by creditors based on the company's social responsibility (Bacha & Ajina, 2020). The purpose of CSR disclosure is to minimize costs resulting from information asymmetry and uncertainty from the perspective of agency theory.

Agency problems, which involve the relationship between agents and owners, lead to information asymmetry. When management, as an agent, has more personal information than the principal or investor, information asymmetry occurs in the capital market; to reduce the cost of capital, information asymmetry must be reduced (Bhuiyan & Nguyen, 2019). The cost of capital is lower if information asymmetry is reduced in the capital market. CSR disclosure is regarded as a vehicle that protects stakeholders from potentially bad managerial

behavior and reduces information asymmetry, thereby lowering the COD (Bhuiyan & Nguyen, 2019; Ghouma et al., 2018).

Additionally, signaling theory provides more arguments on the association between CSR and the COD. Signaling theory emphasizes the significance of the information issued by a company on investment decisions made outside the company. CSR disclosure is one of the most important signals for stakeholders, including creditors, because it provides information and an overview of the company's current state of sustainable development issues (El Ghoul et al., 2011). Creditors require relevant, accurate, complete, and timely information as stakeholder analysis tools when making investment decisions. By disclosing CSR reports, two goals are met to maximize public interest, the first of which is to fulfill the public interest in obtaining more informative corporate disclosure reports, thereby reducing information asymmetry (La Rosa et al., 2018). Second, companies that report CSR have good prospects for the future, so creditors will provide funds to the company. The CSR report contains information on environmental potential, social responsibilities, and thus, long-term value and CSR data can be used to analyze a company's risk profile. According to Connelly et al. (2011), signalers are companies that convey CSR information, where CSR is likened to a signal to its recipients, namely creditors, to reduce information asymmetry. After receiving a positive signal or information from the company, the creditor will take action regarding investment in the company in question. Consequently, companies with more CSR disclosures experience lower debt capital costs.

A study conducted by Kuo et al. (2021) with a sample of 803 companies listed on the Taiwan Stock Exchange and Taipei discovered that CSR disclosure tends to reduce the COD. Nguyen et al. (2020) discovered that debt holders are willing to provide long-term debt to companies that report CSR because the company is thought to have a great deal of responsibility. Thus, creditors offer lower debt rates than companies that do not disclose CSR. The research conducted by Gong et al. (2021), which uses companies registered in China with a sample size of 10,937, finds that if a company commits a violation that results in a penalty from the regulator, the COD will increase, but if the company violates regulations but reports CSR, the COD will not increase. Therefore, CSR is regarded as a company insurance in China. Then, Xu et al. (2021) and Guo et al. (2023), discovered, using a sample of 2144 companies in China, that companies that report CSR in the long term and have high CSR values result in debtholders being willing to provide lower debt costs than companies that do not report CSR. Duggal et al. (2024) use a longitudinal sample of Indian listed companies and find that firms with higher CSR commitments experience lower costs of debt.

In line with the theoretical background and estimation of prior empirical evidence, the following hypothesis is proposed:

**H1.** Corporate social responsibility is negatively associated with the cost of debt ceteris paribus.

The type of ownership of a company can affect CSR (Battisti et al., 2023; Duggal et al., 2024). Family led businesses frequently

have a longer strategy and pay more attention to their family's personal reputation (Shankar & Yadav, 2021), As a result, they will pay more attention to their corporate social environment, resulting in a stronger preference for CSR (Battisti et al., 2023). In the context of a family business, the majority can be actively involved in both the company's daily operations and its management responsibilities (Stock et al., 2024).

Companies will become more dominant in reporting CSR to increase market legitimacy and reputation and to maintain a stable relationship with the government (Selin et al., 2023). One of the factors investors considers when deciding whether to invest in a company is reputation; the other is the company's and family's good name. El Ghoul et al. (2016) also noted that reputation reflects stakeholders' assessments of how well a company meets its relative expectations. Owners and family members will assume that if a family's reputation is bad, investors will be unwilling to give their funds, and the company's performance will suffer as a result (Battisti et al., 2023). This argument encourages family businesses to continue reporting on CSR activities. Compared with other countries, Indonesia has distinct characteristics in terms of its family ownership structure. In Indonesia, ownership structures are more concentrated, with company owners being able to hold positions such as directors or commissioners (Joni et al., 2020).

According to the findings of a study conducted by Shaw et al. (2021) with a sample of 4392 companies in India in 2013, there is a weak relationship between CSR compliance and accounting conservatism in family businesses. Gao et al. (2020), using a sample of 1434 companies in China, discovered that family businesses are generally able to give debtholders trust to provide their funds, information asymmetry, and lower debt costs, so family businesses tend to take less debt and have shorter debt maturities. Swanpitak et al. (2020) discovered that family businesses in Thailand have lower costs than nonfamily businesses using a sample of 2167 data from Thai companies. Duggal et al. (2024) also found that family control affects the relationship between CSR and the COD in India. This study deduces the following hypothesis from the explanation above:

**H2.** Family ownership moderates the relationship between CSR and the cost of debt ceteris paribus.

## 3 | RESEARCH METHODS

## 3.1 | Sample and data

The initial sample for this study included all public companies listed on the IDX between 2017 and 2020. This study period was selected for several reasons. First, the period is after regulation enactment, which requires listed companies to disclose their CSR practices in Indonesia (CSR is mandatory). Second, it was established before the severe impact of the COVID-19 pandemic. This study calculates CSR data using the CSR score index (CSRD) based on 20 criteria or indicators in the calculation proposed by Muttakin and Khan (2014). The CSR score

includes several dimensions: community involvement (three indicators), environmental (one indicator), employee information (nine indicators), product and service information (six indicators), and value-added information (one indicator). CSRD is applied as it was developed for emerging economies (Selin et al., 2023). All CSR information is collected manually from the company's annual report or website if available. Additionally, the study accessed financial data via the Thomson Reuters Datastream. From the Datastream results, 742 companies were obtained. Blank data were excluded until the total sample size reached 2250 observations, and approximately 34.5% (or 776 observations) were family firms. All variables were winsorized at the upper and lower limits of 2% to reduce the impact of outliers. The company year observations are shown in Table 1, Panel A. Panel B consists of the number of companies by industry sector.

## 3.2 | Regression models and variables

The basic model used in this test is a multiple linear regression model in which the influence of CSR on the COD is examined. This model is consistent with the results of previous studies (Benlemlih, 2017; Nguyen et al., 2020). Our specific model is as follows:

$$COD = \beta_0 + \beta_1 CSRD + \beta_2 LEV + \beta_3 SIZE + \beta_4 ICR + \beta_5 YEAR + \beta_6 IND.$$

The second model proves that family ownership moderates the relationship between CSR and COD. Our study follows Aiken et al., 1991; Saleh et al. (2021); Mansour, Al Amosh, et al. (2022) to propose the interaction model as follow:

$$\begin{aligned} \mathsf{COD} = & \beta_0 + \beta_1 \mathsf{CSRD} + \beta_2 f o + \beta_3 \mathsf{LEV} + \beta_4 \mathsf{SIZE} + \beta_5 \mathsf{ICR} + \beta_6 \mathsf{CSRD} \times f_o \\ & + \beta_7 \mathsf{YEAR} + \beta_8 \mathsf{IND}. \end{aligned}$$

In this case, the COD is the dependent variable. CSR is the main independent variable and  $f_o$  is the moderating variable. Then, leverage (LEV), size of the company (SIZE), interest coverage (ICR), year (YEAR), and industry (IND) are considered. Detailed information is presented (Table 2).

#### 3.3 | Cost of debt

Previous studies (Eliwa et al., 2021; Luo et al., 2019; Nguyen et al., 2020) used an accounting-based COD measure, calculated as the ratio of the company's interest expenses divided by its average liabilities. This proxy is appropriate because measures related to sustainability are more related to accounting-based measures than market-based measures because companies look at the financial statements issued by the company itself and the company's managerial performance when making internal decisions rather than seeing the market response, which is an external part of the company to actions taken by the company (Gracia & Siregar, 2021). This is derived from the data collected from Refinitiv eikon on interest expenses and company liability.

**TABLE 1** Sample description.

Panel A: Sample selection						
Calendar year	2017	2018	2019	2020	Total	
Number of sample companies observed on the IDX	742	742	742	742	2968	
Number of sample companies with missing data	-248	-202	-160	-108	-718	
Number of observations in the sample	494	540	582	634	2250	

Panel B: Distribution of companies by industry (IDX IC)

		Company		
Code	Industry description	n	%	
1	Energy sector	205	9.11	
2	Raw goods sector	279	12.4	
3	Industrial ector	167	7.42	
4	Primary consumer sector	275	12.22	
5	Nonprimary consumer sector	371	16.49	
6	Health sector	63	2.8	
7	Financial sector	367	16.31	
8	Property and real estate sector	231	10.27	
9	Technology sector	43	1.91	
10	Infrastructure sector	175	7.78	
11	Transport and logistics sector	74	3.29	
		2250	100	

Abbreviation: IDX, Indonesia Stock Exchange.

TABLE 2 Variable definition.

Variable	Definition
COD (cost of debt)	The COD is calculated by dividing interest expense by the average total long-term and short-term debt
CSRD (CSR)	CSR is assessed using the CSRD criteria consisting of 20 points (Muttakin & Khan, 2014)
$f_o$ (family ownership)	If a family has outstanding company shares, the dummy variable equals one
SIZE (firm's size)	Natural logarithm of total assets
LEV (leverage)	Total debt divided by equity
$CSRD \times f_o$ (interaction)	Interaction variable where the value of CSR is multiplied by the value of family ownership
ICR (interest coverage)	EBITDA divided by interest expense
IND (industry)	Industry indicator variable classified by GICS (Global Industry Classification Standard) codes
YEAR (year)	Indicator variable years: 2017; 2018; 2019; 2020

Abbreviation: CSR, corporate social responsibility.

# 3.4 | Corporate social responsibility

CSRD, specifically, the social responsibility disclosure index score, serves as a proxy for a company's CSR performance. CSR served as the independent variable in this study. This study builds on previous research (Muttakin & Khan, 2014). The study used a checklist of 20 items developed by Muttakin and Khan (2014) and created a

modified checklist with items relevant to Indonesian businesses. The assessment procedure involves examining the points contained in the company in accordance with those listed in the CSRD list, with each point assigned a value of one if disclosed in accordance with the CSRD and 0 if not disclosed in accordance with the CSRD. Following Muttakin and Khan's (2014) study, the CSR disclosure index was created by calculating each point according to the existing criteria given to the highest possible score achieved for the item applicable to the company. The CSRD index was calculated as follows (Muttakin & Khan, 2014):

CSRDj index = 
$$\frac{\sum_{t=i}^{n_j} X_{ij}}{n_i}$$
,

where CSRDj index: social disclosure index in a certain company with a certain year.  $N_j$ : the number of items required where n = 20.  $X_i$ : the number of items applied by company where  $n \le 20$ .

## 3.5 | Family ownership

Family ownership served as a moderating variable in this study. The measurement of this variable uses the criteria of 5% or more share ownership as the total share ownership of the company, as well as the presence of families who occupy managerial positions in the company. The 5% ownership is a cut-off of ownership in the company because, within that range, it already has a considerable influence in making decisions in the company, and some countries also require company

ownership of 10% or less (La Porta et al., 1999). According to Siregar and Utama (2008), in Indonesia, the use of more than 5% is considered effective enough to control the company. Family ownership is represented by a dummy score (Gao et al., 2020), with 1 denoting a company with at least 5% family ownership and 0 denoting a company with less than 5% family ownership.

### 3.6 | Control variables

Following previous studies on debt costs (Ali et al., 2023; Benlemlih, 2017; Duggal et al., 2024; Nguyen et al., 2020), we controlled for variables that can influence the COD capital, including leverage, firm size, ICR, industry, and year fixed effects. In this study, leverage (DER) is defined as the ratio of total debt to equity. Since Duggal et al. (2024) demonstrated that leverage can increase liquidity risk, leverage is included in the model. Next, we calculate firm size (SIZE) using the natural logarithm of total assets. According to Guo et al. (2023), size controls the impact of credit quality on debt maturity. Larger companies are more likely to obtain long-term debt because their credit quality is high (Ben-Nasr et al., 2015; Nguyen et al., 2020). Additionally, ICR is negatively associated with the COD (Joni et al., 2020). It is expected that a higher ICR value is related to a lower COD. We controlled for possible variations over time by applying the year fixed effect (YEAR) in our model. Finally, potential industry effects are controlled using industry indicator variables (IND) based on Global Industry Classification Standard (GICS) codes.

# 4 | EMPIRICAL RESULTS

## 4.1 Descriptive statistics

Table 3 displays descriptive statistics for variables based on a full sample of 2250 observations from 2017 to 2020. For family ownership, our study uses a dummy value set to one if the company is owned by family and zero otherwise. The dependent variable has an average value of 0.273 with a maximum value of 0.071 and a minimum value of 0.000. When compared to previous studies, the COD value is

considered reasonable because it is nearly the same. The average for CSRD and family ownership are 0.425 and 0.345.

A paired Pearson's correlation test was also used to test the relationship between the variables that became the model in this study. The Pearson correlation test excludes industry and year. The highest correlation was observed between COD and DER (r=0.549). This finding suggests that a higher DER is strongly associated with a higher COD (see Table 4). Table 5 shows that the highest variance inflation factor (VIF) for the COD is 1.65, which shows that VIF < 10, meaning that multicollinearity does not occur.

# 4.2 | Corporate social responsibility, family ownership, and cost of debt

Table 5 shows the results of OLS data processing for the first model with a CSRD effect on COD. The OLS results state that the value has a significant negative effect of 5% (coefficient = -0.0349, t = -22.42), and the standard deviation value is 0.0015.

Model 1 in Table 5 shows that CSR has a significant negative effect on the COD, with a coefficient of -0.0349 at the 1% level, consistent with previous studies (Duggal et al., 2024; Gong et al., 2021; Hu et al., 2021; Kuo et al., 2021; Nguyen et al., 2020). When a company reports CSR and has a higher CSR value, it experiences a lower COD, because debtholders perceive it as a positive signal. In line with agency and signaling theories, CSR disclosure is an important vehicle for reducing information asymmetry and providing positive signals to stakeholders, including creditors and investors, as reflected in the lower COD. This means that creditors who view companies as having better CSR are associated with lower corporate risks. This result is economically significant and supports H1.

Model 2 in Table 5 shows that the interaction variable between CSR and family ownership has a significantly negative effect on the COD. Based on the moderated regression analysis, the coefficient of the interaction terms between CSRD and fo (CSRD  $\times$   $f_o$ ) is 0.0128 negative and significant at the 1% level (t-value = -3.01), which supports H2. Clearly, the interaction variable (CSRD  $\times$   $f_o$ ) has a significant negative effect on the COD. In these results, companies that disclose CSR reporting with family businesses will reduce the COD because, in

Variable	N	Mean	Standard deviation	Minimum	Maximum
COD	2250	0.027	0.017	0.000	0.071
CSRD	2250	0.425	0.224	0.000	0.850
fo	2250	0.345	0.475	0.000	1.000
SIZE	2250	21.731	1.800	18.046	25.892
DER	2250	0.394	0.671	0.000	3.361
ICR	2250	0.001	0.007	-0.010	0.040

**TABLE 3** Summary of main variable statistics.

*Note*: This table provides summary statistics for the main variables. The sample includes 2250 companyyear observations for the 2017–2020 periods in the calendar year. Abbreviations: COD, cost of debt; CSR, corporate social responsibility.

Source: Authors (2023).

TABLE 4 Pearson correlation test.

	(1)	(2)	(3)	(4)	(5)	(6)
1. COD	1.000					
2. CSRD	-0.007	1.000				
3. f <sub>o</sub>	0.014	0.032	1.000			
4. SIZE	0.012	-0.042**	-0.022	1.000		
5. DER	0.549***	-0.006	0.009	0.209**	1.000	
6. ICR	-0.017	-0.013	-0.025	-0.014	-0.045**	1.000

Note: The symbols \*\*\*, \*\*, and \* indicate statistical significance at 0.02, 0.05, and 0.10, respectively. Abbreviations: COD, cost of debt; CSR, corporate social responsibility; ICR, interest coverage. Source: Authors (2023).

**TABLE 5** The relation between corporate social responsibility and cost of debt using OLS regression.

	Coefficient estimation		
Variable	Model 1	Model 2	
CSRD	-0.0349 (-22.42)***	0338 (-21.25)***	
f <sub>o</sub>	-	.0024 (3.12)***	
SIZE	0.0012 (7.11)***	.0012 (7.09)***	
DER	0.0047 (9.93)***	.0047 (9.94)***	
ICR	0.0056 (0.12)	.0086 (0.19)	
$CSRD \times f_o$	-	0128 (-3.01)***	
IND	Included	Included	
YEAR	Included	Included	
Mean VIF	1.65	1.64	
Adj. R <sup>2</sup>	0.3242	0.3273	
F	64.46	58.59	
Prob > F	0.0000	0.0000	
N	2250	2250	

Note: This table shows the results of the COD regression on corporate social responsibility (CSRD), family ownership with a dummy value ( $f_o$ ), the interaction variable between CSR and family ownership (CSRD  $\times$   $f_o$ ), and the control variable in the form of year and industry. The symbols \*\*\*, \*\*, and \* indicate statistical significance at 0.02, 0.05, and 0.10, respectively. Abbreviations: CSR, corporate social responsibility; ICR, interest coverage. Source: Authors (2023).

the case of family businesses, the company will pay more attention to the company's reputation, and by doing so, the company will make CSR disclosures. Creditors pay attention to the COD to a company because the company has a plus. Companies will strive to operate in the long term so that their legacy can be passed down to future generations, while also maintaining a focus on environmental and social reporting.

# 4.3 | Discussion

The first hypothesis was supported by the regression results presented in Table 5. It can be stated that if a company is concerned with

the interests of its stakeholders, the stakeholders will support it. With the creation of a CSR report, the company has provided information related to the company, which is one of the stakeholders' interests in obtaining information to reduce information asymmetry so that investors/debtholders are willing to provide lower interest costs. By reporting CSR, stakeholders can monitor company reports and the company's state more easily, lowering the risk of the company being unable to pay its debts. Transparency in reporting reduces agency issues between companies and debtholders.

The findings of this study also support the second hypothesis, which holds that family ownership with more CSR disclosures can lower the COD. In this case, the company attempts to establish a good reputation in the eyes of debtholders. Thus, family businesses engage in CSR reporting so that debtholders can create a positive image for the company and reduce information asymmetry. The disclosure of CSR will support lower agency costs, where the COD to be received by the company will be lower and the company's reputation will improve.

## 4.4 | Endogeneity

According to previous studies, family led businesses demonstrate that family ownership and management control can have varying effects on firm value, which in turn affects COD costs (e.g., Chiu & Wang, 2019). In theory, family management reduces agency problems associated with the classic owner-manager conflict described by Jensen and Meckling (2019), resulting in a positive effect on the value of family management. However, if professionals are better managers than family founders or corporate heirs, this effect can be offset by the costs of family management (Lim, 2021).

To address potential concerns about our test specification, specifically endogeneity, we conducted a study using the Generalized Method of Moments GMM. The GMM is considered an efficient estimator in the presence of heteroscedasticity and a normal asymptotic estimator in the absence of heteroscedasticity (e.g., Joni et al., 2020; Mansour, Aishah Hashim, et al., 2022; Saleh et al., 2022; Ullah et al., 2018; Wintoki et al., 2012). The GMM technique has the advantage of ensuring heteroscedasticity and consistent autocorrelation in the standard error of estimates. The results of the tests conducted

**TABLE 6** The relation between corporate social responsibility and cost of debt—GMM model.

	Coefficient estimation	Coefficient estimation		
Variable	Model 1	Model 2		
CSRD	-0.0057 (-2.15)**	0058 (-2.32)**		
fo	-	.0014 (0.46)		
SIZE	0.0006 (-3.98)***	0006 (-4.04)***		
DER	0.0074 (9.93)***	.0007 (29.47)***		
ICR	0.0000 (0.37)	.0000 (0.30)		
$CSRD \times f_o$	-	0126 (-2.41)***		
b <sub>o</sub>	0.0210 (5.33)***	0.019 (4.76)***		

Note: The symbols  $^{***}$ ,  $^{**}$ , and  $^{*}$  indicate statistical significance at 0.02, 0.05, and 0.10, respectively.

Abbreviations: CSR, corporate social responsibility; GMM, generalized method of moments; ICR, interest coverage.

Source: Authors (2023).

in this study (see Table 6) do not deviate from the test results in Table 5.

### 5 | CONCLUSIONS

This study examines the effect of CSR on the COD in Indonesian firms, with family ownership acting as a moderating variable. This study chose Indonesian companies because CSR disclosure is required in Indonesia, as stated in Law No. 40 of 2007, concerning Limited Liability Companies, Article 1 Number 3, related to social and environmental responsibility. The findings of this study are consistent with those of prior studies (Duggal et al., 2024; Gao et al., 2020) and state that companies that build a strong corporate image and reputation by disclosing CSR will reduce COD. Indonesia is a developing country in which debt financing plays a significant role in business. This is one of the disclosures that the principal can accept when making reports related to corporate responsibility in the social environment. This allows investors or creditors to consider whether they will reduce the COD by reviewing a company's CSR reports. This study demonstrates that a company's image will improve if it has a high CSR value and a high proportion of family ownership. In Indonesia, the family of heirs leads to the leadership of a family company, such as the board of directors and commissioners. Therefore, when a company is led by a family and reports on CSR, it reduces information asymmetry and increases the principal's trust in the company by providing funds. These findings are in line with Agency and Signaling theories, which indicate that CSR disclosure is an effective tool to minimize agency conflicts and is perceived positively by creditors. Therefore, firms with more CSR disclosures experience lower COD financing.

This study has important implications for company managers, regulators, and academics. Because company managers are expected to pay attention to CSR reporting, they must consider and implement CSR programs when developing debt reduction strategies. According to the findings of our study, creditors regard CSR performance as one of better risk management and information asymmetry, and creditors will consider providing cheaper debt financing to companies that actively disclose CSR. Compliance strategies are much better for company managers, because mandatory CSR is inevitable. Additionally, the study highlights the importance of efficient regulation and effective monitoring of regulators for companies to implement sustainable CSR reports. This can be a consideration for future impacts, particularly for companies that are directly related to ecosystems or the environment, and will have a long-term impact on the state of the ecosystem to pay close attention and be accountable for CSR.

The study also adds to the literature on family ownership, which moderates CSR with a COD, where no one has done this research in Indonesia, and the results obtained can provide additional literature for stakeholders, particularly family businesses, to pay attention to CSR reporting. This study also contributes to the academic field by increasing knowledge about CSR reporting, which has the potential to reduce agency costs and information asymmetry, both of which will have an impact on debt financing provided by investors. CSR can also help the ecosystem in the environment surrounding the industry, because the company has taken responsibility for its actions toward the environment through CSR reports. This should be a factor for stakeholders when providing funds to the company so that the company is responsible for the social environment as well as profit.

The findings of this study must be interpreted with several limitations in mind. First, in terms of debt financing, it is necessary to distinguish between long- and short-term debt to clarify the specifications for the COD due to differences in the time period for borrowing funds. Second, when conducting a CSR test, it is necessary to distinguish between industries (mining, agriculture, health, etc.) because each industry has different effects on the environment and society, which are then linked to the COD. Third, additional research is recommended to broaden the research by including companies from developing countries, particularly ASEAN. Further research can examine other ownership structures, such as institutional or government ownership, which are also prevalent in the context of companies listed on the IDX.

#### **AUTHOR CONTRIBUTIONS**

Meilinda Sari as the first author has made a major contribution in conception and design, data acquisition, and data analysis. Next, Joni Joni as second author and corresponding author has been involved in drafting the manuscript or revising it critically for important intellectual content, and then considering the final approval of the version to be published. Joni has participated sufficiently in the work to take public responsibility for the appropriate parts of the content; and agree to be accountable for all aspects of the work in ensuring that questions regarding the accuracy or integrity of any part of the work are appropriately investigated and resolved. The third author is Enda Karina. She has made substantial contributions to the analysis and interpretation of data.

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#### **ORCID**

Joni Joni https://orcid.org/0000-0003-2768-2518

#### **ENDNOTE**

<sup>i</sup> The result is not tabulated, yet it is available upon request.

#### REFERENCES

- Aiken, L. S., West, S. G., & Reno, R. R. (1991). Multiple regression: Testing and interpreting interactions. Sage.
- Ali, K., Nadeem, M., Pandey, R., & Bhabra, G. S. (2023). Do capital markets reward corporate climate change actions? Evidence from the cost of debt. Business Strategy and the Environment, 32(6), 3417–3431. https://doi.org/10.1002/bse.3308
- AlKhouri, R., & Suwaidan, M. S. (2023). The impact of CSR on the financing cost of Jordanian firms. *Social Responsibility Journal*, 19(3), 460–473.
- Bacha, S., & Ajina, A. (2020). CSR performance and annual report readability: Evidence from France. Corporate Governance: The International Journal of Business in Society, 20(2), 201–215.
- Bacha, S., Ajina, A., & Ben Saad, S. (2021). CSR performance and the cost of debt: Does audit quality matter? *Corporate Governance*, 21(1), 137–158.
- Battisti, E., Nirino, N., Leonidou, E., & Salvi, A. (2023). Corporate social responsibility in family firms: Can corporate communication affect CSR performance? *Journal of Business Research*, 162, 113865.
- Benlemlih, M. (2017). Corporate social responsibility and firm debt maturity. *Journal of Business Ethics*, 144(3), 491–517.
- Ben-Nasr, H., Boubaker, S., & Rouatbi, W. (2015). Ownership structure, control contestability, and corporate debt maturity. *Journal of Corporate Finance*, 35, 265–285.
- Bhuiyan, M. B. U., & Nguyen, T. H. N. (2019). Impact of CSR on cost of debt and cost of capital: Australian evidence. Social Responsibility Journal, 16, 419–430.
- Chiu, W. C., & Wang, C. W. (2019). Rollover risk and cost of bank debt: The role of family-control ownership. *Pacific-Basin Finance Journal*, 53, 362–378.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67.
- Cui, J., Jo, H., & Na, H. (2018). Does corporate social responsibility affect information asymmetry? *Journal of Business Ethics*, 148(3), 549–572.
- Duggal, N., He, L., & Shaw, T. S. (2024). Mandatory corporate social responsibility spending, family control, and the cost of debt. *The British Accounting Review*, 101356.
- El Ghoul, S., Guedhami, O., Kwok, C. C., & Mishra, D. R. (2011). Does corporate social responsibility affect the cost of capital? *Journal of Banking & Finance*, 35(9), 2388–2406.
- El Ghoul, S., Guedhami, O., Wang, H., & Kwok, C. C. (2016). Family control and corporate social responsibility. *Journal of Banking & Finance*, 73, 131–146.
- Eliwa, Y., Aboud, A., & Saleh, A. (2021). ESG practices and the cost of debt: Evidence from EU countries. Critical Perspectives on Accounting, 79, 102097.
- Elkington, J. (1997). The triple bottom line. Environmental Management: Readings and Cases, 2, 49–66.

- Gao, H., He, J., Li, Y., & Qu, Y. (2020). Family control and cost of debt: Evidence from China. *Pacific-Basin Finance Journal*, 60, 101286
- Ghouma, H., Ben-Nasr, H., & Yan, R. (2018). Corporate governance and cost of debt financing: Empirical evidence from Canada. The Quarterly Review of Economics and Finance, 67, 138–148.
- Gong, G., Huang, X., Wu, S., Tian, H., & Li, W. (2021). Punishment by securities regulators, corporate social responsibility and the cost of debt. *Journal of Business Ethics*, 171(2), 337–356.
- Gracia, O., & Siregar, S. V. (2021). Sustainability practices and the cost of debt: Evidence from ASEAN countries. *Journal of Cleaner Production*, 300. 126942.
- Guo, M., Zheng, C., & Li, J. (2023). Corporate social responsibility and debt financing cost: Evidence from China. Environment, Development and Sustainability, 1–29. https://doi.org/10.1007/s10668-023-03348-0
- Harjoto, M., & Laksmana, I. (2018). The impact of corporate social responsibility on risk taking and firm value. *Journal of Business Ethics*, 151(2), 353–373.
- He, X. (2023). CSR communication and corporate accountability in the post-Covid-19 era. Social and Environmental Accountability Journal, 43,
- Hossain, A. T., & Kryzanowski, L. (2021). Political corruption and corporate social responsibility (CSR). Journal of Behavioral and Experimental Finance, 31, 100538.
- Hu, Q., Zhu, T., Lin, C. L., Chen, T., & Chin, T. (2021). Corporate social responsibility and firm performance in China's manufacturing: A global perspective of business models. Sustainability, 13(4), 2388.
- Jannat, M., Haque, M. M., & Chowdhury, M. A. F. (2022). Does trust mediate in corporate social responsibility (CSR) and brand equity nexus? Empirical evidence from the banking sector. FIIB Business Review, 13 (3). https://doi.org/10.1177/23197145221110285
- Jensen, M. C., & Meckling, W. H. (2019). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate gover*nance (pp. 77–132). Gower.
- Joni, J., Ahmed, K., & Hamilton, J. (2020). Politically connected boards, family and business group affiliations, and cost of capital: Evidence from Indonesia. The British Accounting Review, 52(3), 100878.
- Kuo, L., Kuo, P. W., & Chen, C. C. (2021). Mandatory CSR disclosure, CSR assurance, and the cost of debt capital: Evidence from Taiwan. Sustainability, 13(4), 1768.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517.
- La Rosa, F., Liberatore, G., Mazzi, F., & Terzani, S. (2018). The impact of corporate social performance on the cost of debt and access to debt financing for listed European non-financial firms. European Management Journal, 36(4), 519–529.
- Lim, E. W. (2021). Concentrated ownership, state-owned enterprises and corporate governance. Oxford Journal of Legal Studies, 41(3), 663-691.
- Luo, W., Guo, X., Zhong, S., & Wang, J. (2019). Environmental information disclosure quality, media attention and debt financing costs: Evidence from Chinese heavy polluting listed companies. *Journal of Cleaner Pro*duction, 231, 268–277.
- Madden, L., McMillan, A., & Harris, O. (2020). Drivers of selectivity in family firms: Understanding the impact of age and ownership on CSR. Journal of Family Business Strategy, 11(2), 100335.
- Mansour, M., Aishah Hashim, H., Salleh, Z., Al-ahdal, W. M., Almaqtari, F. A., & Abdulsalam Qamhan, M. (2022). Governance practices and corporate performance: Assessing the competence of principal-based guidelines. Cogent Business & Management, 9(1), 2105570.
- Mansour, M., Al Amosh, H., Alodat, A. Y., Khatib, S. F., & Saleh, M. W. (2022). The relationship between corporate governance quality and firm performance: The moderating role of capital structure. Sustainability, 14(17), 10525.
- Maury, B. (2022). Strategic CSR and firm performance: The role of prospector and growth strategies. *Journal of Economics and Business*, 118, 106031.

- Muttakin, M. B., & Khan, A. (2014). Determinants of corporate social disclosure: Empirical evidence from Bangladesh. Advances in Accounting, 30(1), 168–175.
- Nguyen, V. H., Choi, B., & Agbola, F. W. (2020). Corporate social responsibility and debt maturity: Australian evidence. *Pacific-Basin Finance Journal*, 62, 101374.
- Saleh, M. W., Eleyan, D., & Maigoshi, Z. S. (2022). Moderating effect of CEO power on institutional ownership and performance. EuroMed Journal of Business, ahead-of-print. https://doi.org/10.1108/EMJB-12-2021-0193
- Saleh, M. W., Zaid, M. A., Shurafa, R., Maigoshi, Z. S., Mansour, M., & Zaid, A. (2021). Does board gender enhance Palestinian firm performance? The moderating role of corporate social responsibility. Corporate Governance, 21(4), 685–701.
- Selin, M., Joni, J., & Ahmed, K. (2023). Political affiliation types and corporate social responsibility (CSR) commitment: Evidence from Indonesia. Journal of Accounting & Organizational Change, 19(1), 24–39.
- Shankar, A., & Yadav, R. (2021). Understanding the impact of CSR domain on brand relationship quality. Marketing Intelligence & Planning, 39(4), 559–573
- Shaw, T. S., Raithatha, M., Krishnan, G. V., & Cordeiro, J. J. (2021). Did mandatory CSR compliance impact accounting conservatism? Evidence from the Indian Companies Act 2013. *Journal of Contemporary* Accounting & Economics, 17(3), 100280.
- Siregar, S. V., & Utama, S. (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. The International Journal of Accounting, 43(1), 1–27.
- Stock, C., Pütz, L., Schell, S., & Werner, A. (2024). Corporate social responsibility in family firms: Status and future directions of a research field. *Journal of Business Ethics*, 190(1), 199–259.

- Swanpitak, T., Pan, X., & Suardi, S. (2020). Family control and cost of debt: Evidence from Thailand. *Pacific-Basin Finance Journal*, 62, 101376.
- Ullah, S., Akhtar, P., & Zaefarian, G. (2018). Dealing with endogeneity bias: The generalized method of moments (GMM) for panel data. *Industrial Marketing Management*, 71, 69–78.
- Uyar, A., Gerged, A. M., Kuzey, C., & Karaman, A. S. (2024). Do CSR performance and reporting facilitate access to debt financing in emerging markets? The role of asset structure and firm performance. Review of Accounting and Finance, 23(2), 157–185.
- Wang, Y., Delgado, M. S., & Xu, J. (2023). When and where does it pay to be green?—A look into socially responsible investing and the cost of equity capital. *International Journal of Corporate Social Responsibility*, 8(1), 1–23.
- Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Eco*nomics, 105(3), 581–606.
- Xu, H., Xu, X., & Yu, J. (2021). The impact of mandatory CSR disclosure on the cost of debt financing: Evidence from China. *Emerging Markets Finance and Trade*, 57(8), 2191–2205.

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