

CSR and financial institution ownership in managing the cost of capital

CSR e propriedade da instituição financeira na gestão do custo de capital

Saarce Elyse Hatane^{1,2} , Noorlailie Soewarno¹ 

¹ Universitas Airlangga, Accounting Department, Surabaya, Indonesia. E-mail: saarce.elyse.hatane-2020@feb.unair.ac.id; elsyehat@petra.ac.id; noorlailie-s@feb.unair.ac.id

² Petra Christian University, School of Business and Management, Accounting Department, Surabaya, Indonesia.

How to cite: Hatane, S. E., & Soewarno, N. (2024). CSR and financial institution ownership in managing the cost of capital. *Gestão & Produção*, 31, e13022. <https://doi.org/10.1590/1806-9649-2024v31e13022>

Abstract: This study aims to examine the influence of corporate social responsibility (CSR) performance and financial institution ownership on the cost of capital for companies in the tourism and hospitality industry at ASEAN-5. A balanced panel data of 594 firm-year observations from 2014-2019 in ASEAN-5. CSR performance data results from content analysis in the annual reports of ninety-nine companies. The WACC is the proxy for the cost of capital. The research framework applies the weighted least square of panel effect regression. The statistical results indicate that CSR performance raises the cost of capital while financial institution ownership diminishes. Also, environment and human rights disclosures are components of CSR disclosures that reduce the cost of capital. The results are limited to the tourism and hospitality industry of ASEAN-5. Future studies may consider using other than KLD to measure CSR. Besides, this study only focuses on financial institution ownership. Future studies can examine other types of ownership, such as managerial and government ownership. This research is the first to examine CSR and Financial Institution Ownership's role in the cost of capital in the tourism and hospitality industry within the 5 ASEAN countries.

Keywords: CSR; Cost of capital; Financial institution ownership; Tourism and hospitality; ASEAN-5.

Resumo: Este estudo examina a influência do desempenho da responsabilidade social corporativa (CSR) e da propriedade da instituição financeira no custo de capital das empresas do setor de turismo e hospitalidade na ASEAN-5. Um painel de dados balanceado de 594 observações de empresas-ano de 2014-2019 na ASEAN-5. Os dados de desempenho de RSE resultam da análise de conteúdo nos relatórios anuais de 99 empresas. O WACC é a proxy para o custo de capital. A estrutura de pesquisa é examinada usando o mínimo quadrado ponderado da regressão de efeito de painel. Os resultados estatísticos indicam que o desempenho da RSC aumenta o custo de capital, enquanto a propriedade da instituição financeira institucional diminui. Além disso, as divulgações ambientais e de direitos humanos são componentes das divulgações de RSE que reduzem o custo de capital. Os resultados são limitados à indústria de turismo e hotelaria da ASEAN-5. Estudos futuros podem considerar o uso de outros métodos além do KLD para medir o CSR. Além disso, este estudo se concentra apenas na propriedade de instituições financeiras institucionais. Estudos futuros podem examinar outros tipos de propriedade, como a propriedade gerencial e governamental. Esta pesquisa é a primeira a examinar o papel da CSR e da Propriedade de Instituições Financeiras Institucionais no custo de capital no setor de turismo e hospitalidade nos 5 países da ASEAN.

Palavras-chave: CSR; Custo de capital; Propriedade de instituições financeiras; Turismo e hospitalidade; ASEAN-5.

Received Aug. 8, 2023 - Accepted Jan. 31, 2024

Financial support: None.



This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

1 Introduction

The cost of capital is inevitable in the operation of a company. Given that the cost of capital is unavoidable, it does not mean that companies cannot reduce the cost of capital, so management and investors must have a specific strategy to reduce the cost of capital. Previous studies have shown a high correlation between CSR performance and the cost of capital. CSR can be a strategy that companies can use to diminish the cost of capital. The World Business Council for Sustainable Development (WBCSD, 2017) explains the meaning of CSR as a business commitment to contribute to sustainable economic development, collaborating with company employees, the families of the company employees, and the community around the company in order to increase and improve the quality of life. By implementing CSR, companies can benefit in the form of a good reputation by conducting activities that have a good impact on society and the public, even though the company has to sacrifice some of the profits to be used as a budget for CSR activities (Devie et al., 2018). Companies with a good image can encourage workers to work more efficiently to achieve a high degree of productivity and performance. It is because workers already have a good perception of companies that conduct CSR. Hence, workers will likely work with a positive and productive attitude toward the company (Yu & Choi, 2014). CSR activities can also be a source of competitive advantage for the company (Mirvis et al., 2016).

CSR is perceived to reduce information asymmetry, and if a firm has a bad CSR performance, investors will ask for compensation for the additional risks (Chen & Zhang, 2021). Bhuiyan & Nguyen (2019) stated that a firm's CSR also reduces the cost of capital, so management and investors should provide a strategy to lower the cost. Prior studies have contrasting views on the implication of CSR in reducing firm's cost of capital. Studies by Suto & Takehara (2017), Hamrouni et al. (2019), Bhuiyan & Nguyen (2019), and Ahmed et al. (2019) proved that CSR is one of the factors that lower the cost of capital. CSR is diminishing cost of capital since CSR is thought to minimise information asymmetry (Bhuiyan & Nguyen, 2019; Hamrouni et al., 2019). Additionally, CSR also helps reduce a company's level of risk, affecting the cost of capital, especially the cost of debt. CSR is beneficial for mitigating the idiosyncratic risk which, in the end, can reduce the cost of capital (Hatane & Soewarno, 2022). However, these results contrast with Magnanelli & Izzo (2017) and Barnea & Rubin (2010), who found CSR to be one factor that increases the cost of capital. This is because CSR is often a tool for maximising managers' interests. CSR is not favourable for a company because it is considered to absorb many resources (Magnanelli & Izzo, 2017).

Another factor affecting the cost of capital is ownership structure, as it is closely related to the cost of equity, which is one of the costs of capital (Saci & Jasimuddin, 2020). Institutional investors have more significant financial strength compared to individual investors, and it is easier to collect market information, which can later be used to analyse the investment value. Easy access to market information is one of the advantages and strengths of financial institutional ownership. The existence of shareholders from financial institutions also encourages company transparency (Huo et al., 2021; Hsieh et al., 2018).

The development of the hotel, tourism and restaurant industries has changed in the last three decades. Consistent economic growth has contributed to increasing the Asian market as a destination for domestic and foreign tourists (Yang & Ong, 2020). The expansion of low-cost carriers and the increase in the use of smartphones in tourism planning, supported by applications and various reviews, influenced tourism increase in Asia. More than 50% of international tourism growth will come from Asia in

2030, and thus, the hotel and restaurant sector will also experience an increase (Tripadvisor, 2021; Yang & Ong, 2020). This research focuses on Indonesia, Singapore, Malaysia, Thailand, and the Philippines as countries in ASEAN that are well-known as tourist destinations. The tourism and hospitality industry in the ASEAN region is multiplying (Bradley et al., 2020). In 2019, ASEAN recorded 133 million tourist visits, an increase of 7% compared to 2018. However, the industry experienced the strongest shock due to the Covid-19 pandemic. Corporate social responsibility (CSR) activities may function as a sustainability strategy that can help the industry survive during a crisis (Qiu et al., 2021; Shin et al., 2021). Moreover, CSR has recently been necessary in the hospitality and tourism industry due to globalization (Shin et al., 2021). This means that CSR has an essential role for companies that are trying to adapt to the business environment and to differentiate themselves by having a competitive advantage in every business location (Ekundayo et al., 2021). Sectors included in the tourism and hospitality industry are hotels, restaurants, tourist attractions, travel agencies, and transportation.

This study contributes to academics and practitioners in the hospitality industry that covers the hotel, tourism, and restaurant sectors in ASEAN. This study focuses on the impacts of CSR and financial institution ownership, each independently, on the cost of capital.

2 Literature review and hypotheses

2.1 Corporate Social Responsibility (CSR)

Corporate social responsibility is the integration of business operations and their values. It reflects the organisation's policies and actions. It is also a form of company responsibility to use resources by not harming society but improving public welfare for long-term corporate gain (Bhuiyan & Nguyen, 2019).

The Stakeholders Theory is a fundamental theoretical background in CSR studies. From a theoretical perspective, the Stakeholders Theory establishes the relationship between CSR performance and financial performance. Interest groups will claim company resources and consider the environment and fair working relations. Interest groups are, in essence, individuals or groups that become the company's support to run its business sustainably and are one of its points of consideration when managing firm strategy (Parmar et al., 2010). Therefore, a company must sustainably monitor its profit and business (Trijanaputri & Djakman, 2019). CSR is inseparable from shareholders and stakeholders in the company. CSR is based on the concept of Triple P: Profit, People, and Planet (Devie et al., 2018). Triple P is a form of responsibility to a company's society and environment, the same way it regards profitability.

2.2 Financial Institution Ownership

Financial institution ownership is ownership by banks, insurance companies, foundations, investment companies, pension funds, and limited liability companies. Institutions generally act as the company's overseers, and a higher level of financial institution ownership will result in better supervision and more efficient asset usage (Nurleni et al., 2018). Financial institution investors could guide management in

improving the performance and disclosure of their activities (Suto & Takehara, 2017). The existence of financial institution investors can reduce agency problems in the company; thus, it leads to effective decision-making and better corporate governance (Panda & Leepsa, 2019).

Financial institution ownership reduces the cost of equity by increasing CSR activities and mitigating information asymmetry in the capital market. Compared to individual investors, institutional financial investors have more significant financial power, and they find it easier to gather market information and analyse an investment's value. This advantage gives strength to financial institutional investors in the capital market (Saci & Jasimuddin, 2020).

2.3 Hypothesis development

Companies that adopt socially responsible practices can reduce information asymmetry. This practice is in line with the signalling theory, where in demonstrating quality, companies provide a signal to the public about their concern through CSR activities, thus creating high perceived value for the company (Hatane & Soewarno, 2022). A company that is committed to conducting CSR activities will achieve a better reputation. A good reputation will help lower the cost of capital and reduce information asymmetry, which will, in turn, cause a decrease in the firm's equity cost (Bhuiyan & Nguyen, 2019). Bhuiyan & Nguyen (2019) and Goss & Roberts (2011) imply that the outcomes of the strength and the concern of CSR are unrelated. Therefore, when the company has more concern than strength, the market will still appreciate its transparency in disclosing its defects. Those studies suggest that transparency in the concern may lead to a lower cost of capital since the management can reduce information asymmetry (Bhuiyan & Nguyen, 2019; Dhaliwal et al., 2006). Therefore, this study proposes:

H1: CSR negatively affects the cost of capital.

Research on the role of institutional investors in good governance shows that institutional investors can direct company management to improve the performance of their companies (Nurleni et al., 2018; Suto & Takehara, 2017). The existence of financial institutional investors also has an impact on the quality of the accounting system in a company (Hsieh et al., 2018). Financial institutional investors tend to invest their funds in companies with sound accounting systems. This sound accounting system is due to institutional investors tending to monitor the company's accounting system. An adequate accounting system will increase the credibility of the company so that the company can obtain loans with lower interest rates. Financial institutional investors can also employ an expert analyst to monitor the company's accounting system. Ownership of financial institutions can reduce the cost of capital (Suto & Takehara, 2017; Faysal et al., 2020). Based on these previous studies, this study proposes:

H2: Financial institution ownership negatively affects the cost of capital.

3 Research methodology

3.1 Sample selection and data collection

This study's sample is firms in the hospitality, tourism, and restaurant industries in five ASEAN countries: Indonesia, Singapore, Malaysia, Thailand, and the Philippines. Studies have explained that the ASEAN-5 countries have the highest PDB in Southeast Asia, with an average growth of 5.3% since 2000, far above the average global growth of 3.8%.

The sampled firms listed in each country's stock exchange are the Indonesia Stock Exchange, Singapore Exchange Limited, the Philippine Stock Exchange, the Stock Exchange of Thailand, and Bursa Malaysia. The criteria also include the firms that launched an IPO and published complete annual reports from 2014 to 2019.

3.2 Variable measurements

3.2.1 Dependent variable

The cost of capital is the dependent variable in this study and is proxied by the weighted average cost of capital (WACC) as measured in Equation 1. The measurement of the cost of equity, as part of WACC, is explained in Equation 2.

$$WACC = \frac{E}{D+E} R_e + \frac{D}{D+E} (1 - \tau) R_d \quad (1)$$

where:

D is the total debt (total financial liabilities)

R_d is cost of debt before tax (ratio of financial costs to total debt)

τ is the tax rate

E is total market value of equity (end year share price x number of shares outstanding)

R_e is cost of capital. It is based on the capital asset pricing model (CAPM) approach.

$$R_e = R_f + [\beta \times (Expected\ Return - R_f)] \quad (2)$$

β is asset beta. It is the volatility of share return. To find Beta (β), stock price data and daily stock price index values are used. 1 week = 7 days, 1 year = 12 months, 1 month = 4 weeks, adjusted for each country's exchange working date.

Risk-free (R_f) is a risk-free investment measured by the interest rate of government bonds in each country.

Expected Return – R_f is the market risk premium, which presents an additional return exceeding the risk-free rate. The market risk premium will be higher when the volatility of the company's share or the composite index is higher. This study counts the risk premium of each company in each country.

3.2.2 Independent variable

There are two independent variables used in this study, as explained in the following:

- a. CSR is the first independent variable and is measured by using the social responsibility rating from the KLD index. There are two main categories assessed, which are CSR Strength and CSR Concern. These categories are *community, corporate governance, diversity, employee relations, environment, human rights, and product*. This research selected these seven categories in accordance with the categories used in the KLD index. Each category of Strength and Concern has several sub-criteria, scored 1 if met and 0 if not. This study calculated total CSR by using the formula in Equation 3:

$$\text{Total CSR Strength} - \text{Total CSR Concern} \quad (3)$$

This study collected the detailed CSR information from each company's annual report and sustainability report. This study presents the list of categories and sub-criteria in the Appendix 1.

- b. Financial Institution Ownership would be referred to as INSTI and is the second independent variable in this study. A financial institution is an institution running in financial services, such as banks, insurance companies, and other institutions that work by collecting funds from the public and channelling them for funding while generating revenue from interest or percentage.

3.2.3 Control variable

In this study, control variables affect the dependent variable. This study used Firm Size (SIZE), Liquidity, and Leverage. Previous studies applied those variables as the control variables (Faysal et al., 2020). Larger companies have better governance and stability. Some prior studies have shown significant relationships between large companies and the decrease in the cost of capital (El Ghoul et al., 2011).

Firm Size is the log of book value of the firm's total assets.

Leverage (LEV) measures long-term financial risk. Leverage is the ratio to measure the number of funds provided by creditors for a company as shown in Equation 4. Magnanelli & Izzo (2017) and Faysal et al. (2020) found that higher use of debt leads to higher cost of capital.

$$\text{Leverage} = \frac{\text{Total Debt}}{\text{Total Equity}} \quad (4)$$

Liquidity (LIQ) that is too high is frequently the shortcoming of management considered inefficient in fund management. However, this can be tolerated as part of management's efforts to reduce the risk of default on creditors (Goss & Roberts, 2011). The measurement of liquidity is shown in Equation 5.

$$\text{Liquidity} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \quad (5)$$

This study also used country level as the control variable. The code for each country is:

1 = Singapore, 2 = Thailand, 3 = Malaysia, 4 = Indonesia, 5 = Philippines. Data collected from Bloomberg, Annual Report, and Sustainability Report. Data collected from Bloomberg are the cost of capital (WACC), Firm Size, Leverage, Current Asset, and Current Liability data. At the same time, this study gathered financial institution ownership data from annual reports and obtained CSR data from content analysis in the annual reports and sustainability reports disclosed by the companies.

3.3 Research model

This study's research model aims to explain the relationship between CSR and Financial Institutions as independent variables with WACC as the dependent variable, and Firm Size, Leverage, Liquidity, Current Asset, and Current Liability as control variables. This study formed the models by using the Weighted Least Squares (WLS) developed in Equation 6 and 7.

Model 1:

$$WACC_{it} = \alpha + \beta_1 CSR_{it} + \beta_2 INSTI_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 LIQ_{it} + \beta_6 Country_{it} + \varepsilon_{it} \quad (6)$$

Model 2:

$$WACC_{it} = \alpha + \beta_1 COM_{it} + \beta_2 CG_{it} + \beta_3 DIV_{it} + \beta_4 EMP_{it} + \beta_5 ENV_{it} + \beta_6 HR_{it} + \beta_7 PROD_{it} + \beta_8 INSTI_{it} + \beta_9 SIZE_{it} + \beta_{10} LEV_{it} + \beta_{11} LIQ_{it} + \beta_{12} Country_{it} \varepsilon_{it} \quad (7)$$

Model one is developed to find the role of CSR performance towards the cost of equity. This research studied the performance of each category in CSR to get more specific insight. Companies and regulators can get insights from the result of model 2 in improving the implementation of CSR activities.

This research applies KLD as a statistical measurement tool consisting of the company's annual reports data on environmental, social, and corporate governance performance, which can be assessed by using KLD Research & Analytics, Inc. to measure the company's CSR performance. KLD divides CSR into 7 main areas, namely Community (COM), Corporate Governance (CG), Diversity (DIV), Employee Relations (EMP), Environment (ENV), Human Rights (HR), and Products (PROD). KLD also includes information on different business matters like alcohol, gambling, firearms, military, nuclear power, and tobacco. Qualitative information in the annual and sustainability reports is quantified using dummy variables. Score 1 is given if the information is provided and score 0 if not provided. This research presents each item of those categories in the Appendix 1. In the end, this research measures the total CSR and total of each CSR category by subtracting the Total Strength from the Total Concern.

4 Result and analysis

4.1 Sample description

The following is Table 1 that further explains each variable, with justification towards mean, median, minimum, maximum, and standard deviation values of each variable.

Table 1. Sample Description.

Variables	Mean	Median	Min	Max	Standard Deviation	Variance Inflation Factor	
						Model 1	Model 2
Dependent Variable							
WACC	6.471	6.317	-11.538	20.653	2.594	-	-
Independent Variable							
CSR	14.86	15	-4	32	8.26	1.11	
Community	3.06	3	-1	8	2.16		2.32
Corporate Governance	2.79	3	-3	6	2.11		1.75
Diversity	1.13	1	-1	6	1.46		1.69
Employee	2.19	2	-3	6	1.83		2.15
Environment	2.07	2	0	6	1.71		1.81
Human Right	1.33	1	-1	4	1.15		3.08
Product	0.94	1	0	4	0.96		1.62
Financial Institution Ownership	16.05	10.16	0	82.68	18.86	1.07	1.14
Firm Size	12.14	12.45	7.46	18.24	1.57	1.03	1.08
Firm Leverage	0.42	0.31	-1	3.95	0.48	1.09	1.15
Firm Liquidity	2.17	1.43	2.11	14.89	2.11	1.13	1.19
Country						1.15	1.44
Heteroskedasticity test						0.138409	0.009366
Fixed Estimator test						9.82817e-009	3.49126e-007
Breusch-Pagan test						3.01883e-008	9.72455e-006
Hausman test						1.05008e-005	6.58729e-007
Summary						Weighted Least Squares	Weighted Least Squares

The descriptive statistic results for each country are presented in Table 2.

Table 2. Sample Description per Country.

Variable	Singapore	Thailand	Malaysia	Indonesia	Philippines
n	114	84	198	90	108
WACC	5.46	7.41	5.96	8.89	5.73
Independent Variable					
CSR	17.67	19.58	7.56	18.22	11.53
Community	3.46	3.76	2.11	4.13	2.96
Corporate Governance	3.83	4.51	0.77	3.12	3.83
Diversity	1.39	2.18	0.71	1.99	1.39
Employee	2.85	3.01	1.58	3.69	0.76
Environment	2.58	2.51	1.73	2.51	1.48
Human Right	1.95	2.57	0.63	1.54	0.83
Product	1.61	1.07	0.05	1.24	1.52
Financial Institution Ownership	24.88	10.87	20.81	1.15	14.44
Firm Size	12.05	12.65	11.96	12.41	11.97
Firm Leverage	0.45	0.49	0.41	0.37	0.41
Firm Liquidity	2.88	1.59	2.38	1.74	1.86

The results imply that independent and control variables have normally distributed values when the standard deviation is close to 0, or at most, below 3. However, the variable Total CSR, one of the independent variables in this study, shows a high standard deviation. This is because of the extreme performances of Sycal Ventures Berhad (period 2015, 2016, 2018, and 2019) and Banyan Tree Holdings Ltd (period 2019). In 2015, 2016, 2018, and 2019, Sycal Ventures Berhad had a total CSR value up to -4, while Banyan Tree Holdings Ltd scored 32. This large gap causes a high standard deviation on the main variable of Total CSR.

The second independent variable, financial institution, has a standard deviation value of 18.87. This is because some companies are dominated and owned by financial institutions, and some companies have no investors from financial institutions.

The average of each variable for each country shows the distinct characteristics of each country. Table 2 shows that Thailand has the best performance in implementing and disclosing its CSR activities, followed by Indonesia and Singapore. In addition, Indonesia has the most expensive capital cost compared to others. Financial institutions in Singapore and Malaysia own many tourism and hospitality companies. Moreover, the performance of each category per year per country is discussed in Tables 3 and 4.

Table 3. CSR Growth in Human Right and Environment Area.

Human Right	Indonesia	Malaysia	Singapura	Thailand	Filipina	Overall
2014	1.07	0.48	1.42	2.57	0.83	1.28
2015	1.33	0.52	2.11	2.57	0.67	1.44
2016	1.40	0.73	1.74	2.57	0.78	1.44
2017	1.60	0.64	2.05	2.57	0.94	1.56
2018	1.73	0.70	2.26	2.57	0.89	1.63
2019	2.13	0.70	2.11	2.57	0.89	1.68
Environment						
2014	1.67	1.61	1.95	2.43	1.22	1.77
2015	2.33	1.70	2.16	2.43	1.11	1.95
2016	2.40	1.76	2.32	2.43	1.28	2.04
2017	2.47	1.73	2.79	2.43	1.72	2.23
2018	2.80	1.79	3.32	2.43	1.78	2.42
2019	3.33	1.79	2.95	2.86	1.78	2.54

Table 4. CSR Growth in Product and Employee Area.

Product	Indonesia	Malaysia	Singapura	Thailand	Filipina	Overall
2014	1.33	0.00	1.37	1.00	1.44	1.03
2015	1.20	0.06	1.58	1.00	1.44	1.06
2016	1.20	0.06	1.53	1.07	1.44	1.06
2017	1.20	0.06	2.00	1.00	1.67	1.19
2018	1.20	0.06	1.63	1.21	1.56	1.13
2019	1.33	0.06	1.58	1.14	1.56	1.13
Employee						
2014	3.27	1.52	2.68	3.00	0.61	2.22
2015	3.40	1.48	2.63	3.00	0.61	2.23
2016	3.40	1.61	2.42	3.00	0.89	2.26
2017	4.07	1.52	2.89	3.00	0.78	2.45
2018	3.87	1.67	3.21	3.00	0.83	2.52
2019	4.13	1.67	3.26	3.00	0.83	2.58

From Table 3 and Table 4, the disclosure of CSR in human rights, environment, products, and employee categories in the company's sample has increased from year to year. This increase indicates that companies are paying more attention to the disclosure of CSR activities in the aspects of Human Rights and the Environment. Although, if seen in Table 1, the average value for disclosure of human rights and environmental aspects tends not to be high, this does not mean that companies do not conduct CSR. CSR disclosure is sometimes shown through the company's website and other media.

4.2 Regression result

Table 1 shows that there is no collinearity problem since the VIF values of models 1 and 2 are less than 10. The results of heteroskedasticity test between models 1 and 2 are different. Model 1 has no heteroskedasticity problem as the p-value is >0.05, while model 2 contains a heteroskedasticity problem since the p-value is <0.05.

The data panel testing on all the following models showed that the best estimator model has a fixed effect. However, since Model 2 contains heteroskedasticity, data panel testing must use Weighted Least Squares (WLS). To make the model comparative and reliable, Model 1 is also tested by WLS regression.

4.3 Hypotheses and study results

Table 5. Hypotheses Testing Results.

Model 1		Model 2	
Dependent:	WACC	Dependent:	WACC
Constanta	3.220760***	Constanta	3.39567***
Total CSR	0.0225362***	Community	0.0197499
		Corporate Governance	-0.0564535
		Diversity	0.0173474
		Employee	0.396567***
		Environment	-0.182305***
		Human Right	-0.216787**
		Product Total	0.174511**
Financial Institution	-0.0316418***	Financial Institution	-0.0288484***
Firm Liquidity	-0.0209146	Firm Liquidity	-0.0421958**
Firm Size	0.310292***	Firm Size	0.291957***
Firm Leverage Country	-0.738400***	Firm Leverage Country	-0.619481***
	0.260994***		0.27491***
Panel Model	WLS	Panel Model	WLS
Adjusted R-squared	0.340638	Adjusted R-squared	0.358704
P-value (F)	4.33E-52	P-Value (F)	8.84E-52

** = p<5% (significant). *** = p<1% (strongly significant).

Table 5 shows that the variable control firm size is positive and significantly affects WACC in both models. It means that firm Size increases WACC. Meanwhile, firm leverage has a negative effect, and the firm liquidity insignificantly affects WACC.

Total CSR in Model 1 positively influences WACC, meaning a company employing CSR tends to have a higher WACC. This result contrasts with prior studies by Suto and Ahmed et al. (2019), Bhuiyan & Nguyen (2019), Hamrouni et al. (2019), and Suto & Takehara (2017). CSR increases WACC since banks consider CSR to be an expensive waste of resources that also increases risk. Even worse, CSR is thought to be an effort by managers to gain personal profits by sacrificing shareholders' needs (Barnea & Rubin, 2010; Magnanelli & Izzo, 2017).

However, when this research tested H1 with Model 2, the results are different. Model 2 explains the CSR components in more depth and divides CSR activities into 7 categories: Community, Corporate Governance, Diversity, Employee Relations, Environment, Human Rights, and Product. From these activities, two categories negatively impact WACC, namely Environment and Human Rights. This result complies with studies by Ahmed et al. (2019), Bhuiyan & Nguyen (2019), Hamrouni et al. (2019), and Suto & Takehara (2017). Meanwhile, the variable Corporate Governance negatively affects WACC but is not significant. From this result, this research concludes that a company can focus on the environmental and Human rights area to mitigate the WACC. In contrast, Employee and Product CSR areas are increasing WACC.

CSR that negatively affects the cost of equity will in turn reduces operational risks. A company with low operational risks will have a lower equity cost, affecting long-term financial performance (Chen & Zhang, 2021; Hatane & Soewarno, 2022). CSR Environment in the tourism industry involves energy-saving, environmentally friendly energy, and carbon emission reduction. CSR for the tourism industry is vital. The environment is a noteworthy part of CSR for stakeholders (Mohammed & Al-Swidi, 2019). Reducing carbon emissions, for example, is crucial for debtors when lending out funds since there are regulations on carbon emissions. Using resources that generate excessive carbon emission is then thought to increase firm risk (Li et al., 2014).

Human rights as a CSR component can help in managing WACC. For instance, the activities regarding investment and procurement practices, non-discrimination, freedom of association and collective bargaining, eradication of child labour, forced and compulsory labours, security practices, assessment, and remediation (Cahaya & Hervina, 2019). Multilateral funding institutions, such as the World Bank and other international financial institutions, would consider the company's compliance with environmental, social, and human rights regulations before providing a loan (Emeseh & Songi, 2014). Hence, companies that pay attention to human rights will have more funding options, causing more accessible funding and indirectly reducing WACC.

CSR in the category of products covers anticipation of defective products and compensation for customer dissatisfaction. When a company creates a product that does not meet the standard or customer expectations, dissatisfaction will lead to customers' destructive behaviour, such as negative statements that can damage the product's reputation and brand, causing a decline in sales (Kim & Park, 2020). Consequently, companies should hold campaigns to create a more positive perspective of the offered product, lessening the adverse effects and customer disappointment over the non-compliant product (Dawar & Pillutla, 2000). Even when products, as a CSR category, lower firm risk, they are thought to increase operational costs for stakeholders and creditors. The items in product disclosures can also be a punishment for the company's failure in developing products, in return causing an increase in WACC.

To create prosperity for its employees, CSR activities are needed, including compensation, work safety, and company care. Firm investments in employee areas are expected to improve employee welfare, resulting in a productivity increase

(Chen et al., 2016; Liu et al., 2020). However, employee-focused CSR activities might instead be the cause of increasing WACC. While employee CSR is decided by the management, based on agency theory, management also tends to maximise its interest (Jensen & Meckling, 1976). It creates an opportunity for management to use CSR for its interests, causing concerns from investors and debtors (Barnea & Rubin, 2010; Magnanelli & Izzo, 2017).

Based on the Stakeholders Theory, the result of this research shows that CSR is a form of management responsibility to shareholders. Although not all CSR areas play a role in reducing WACC, from the results of the regression test above, two areas of CSR can reduce WACC, namely Environment and Human Rights.

Next, from the analysis result of Model 1, financial institution ownership has a negative coefficient on WACC. It is consistent with studies by Suto & Takehara (2017), and Nurleni et al. (2018). Analysis from Model 2 is in line with Model 1, which states that financial institution ownership has favourable effects on WACC. The existence of financial institution ownership pushes for transparency from the company, which results in a lower cost of equity (Bhuiyan & Nguyen, 2019; Nurleni et al., 2018). A lower cost of equity will reduce WACC, as the cost of equity is a component of WACC. From the analyses of Model 1 and 2, H2 is accepted. Institutional shareholders tend to buy the shares of a company with good accounting quality. Good accounting quality helps firms reduce the cost of capital since it lowers information asymmetry (Huo et al., 2021; Hsieh et al., 2018). Financial institution ownership also provides easy access to loan funds and is a factor that reduces WACC.

Stakeholders Theory also supports this finding. From the perspective of Stakeholder Theory, companies are demanded to act responsibly towards the parties related to business operation activities, even if not directly (O'Dwyer, 2003; Salehi et al., 2017). A responsibility from shareholders will affect a company's WACC. A company with high financial institution ownership is at a lower risk of earning manipulation (Chung et al., 2002; Mitra & Cready, 2005; Rajgopal & Venkatachalam, 1997). An effective ownership structure plays a positive role in benefitting all stakeholders, leading to lower agency costs and the equity cost (Ducassy & Guyot, 2017; Faysal et al., 2020).

In this study, Model 2 is used as a Robustness test. This test aims to ensure that the independent variables used for this research strongly affect the dependent variable. From the result of Model 2 in Table 5, Financial Institutions consistently affect WACC negatively and significantly. This effect confirms the result of hypothesis testing, i.e. financial institution ownership has a negative effect on WACC. Finally, from Table 5, variables Employee and Product are consistent with Total CSR as presented in Model 1, where the variables Employee and Product are positively significant on WACC. Countries also affected the results of Model 1 and Model 2. The meaningful results at the country level indicate that each country has its characteristics of CSR activities and interest in financial institution ownership in the tourism and hospitality industries. Table 2 supports these regression results by showing the distinct levels of performance of each variable in each country. These results also imply that a potential study can be done for each country in ASEAN, in particular for the tourism and hospitality industries.

4.4 Managerial implications

This research is helpful for both knowledge and practitioners in the tourism, hospitality, and restaurant industries. Reducing operational costs, including capital

costs, is incredibly important in business operational activities. Funding can be a problem for companies, especially if the economy is flat. Therefore, the company requires specific strategies to reduce the cost of capital. CSR can be an alternative strategy for companies. However, not all CSR activities can reduce the cost of capital. Companies should focus on Environmental and Human Rights categories to manage their capital cost.

Companies can also regulate their ownership structure to reduce the capital cost. In an uncertain situation, it is hard to attract and find investors to invest in industries affected by the pandemic. However, this does not mean that companies cannot attract investors from the financial sector to invest in companies. Besides, companies can issue convertible bonds as an option to get funding at a lower cost and mitigate risks to investors.

5 Conclusion

From the discussion, this research concludes that CSR can diminish the cost of capital. Although not all CSR components can reduce the cost of capital, companies can use environmental and Human Rights as a strategy to reduce WACC. Other results also show that ownership structure can affect the cost of capital significantly. Companies with a higher institutional investor composition tend to have a lower cost of capital. This condition can happen because companies with higher institutional investors tend to have a lower level of information asymmetry and the possibility of manipulating earnings. Also, companies with higher financial institution ownership have lower risks and responsibilities.

Apart from the research analysis, this study has limitations in certain aspects. As the business is constantly changing, the items in CSR performance may improve, and there are standards in disclosing the CSR activities. Therefore, further research can measure the total CSR variables more comprehensively. In addition, this research is limited to the tourism and hospitality industries. Future research can implement and improve the frameworks of this study in other specific industries, either in ASEAN or any other regions or countries.

Acknowledgements

Thank you for the support from the Faculty of Economics and Business Universitas Airlangga and the School of Business and Management Petra Christian University.

Statement on Data Availability

Not applicable.

References

- Ahmed, D. A. H., Eliwa, Y., & Power, D. M. (2019). The impact of corporate social and environmental practices on the cost of equity capital: UK evidence. *International Journal of Accounting and Information Management*, 27(3), 425-441. <http://dx.doi.org/10.1108/IJAIM-11-2017-0141>.
- Barnea, A., & Rubin, A. (2010). Corporate social responsibility as a conflict between

- shareholders. *Journal of Business Ethics*, 97(1), 71-86. <http://dx.doi.org/10.1007/s10551-010-0496-z>.
- 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(3), 419-430. <http://dx.doi.org/10.1108/SRJ-08-2018-0208>.
- Bradley, C., Choi, W., Seong, J., Stretch, B., Tonby, O., Wang, P., & Woetzel, J. (2020). *The future of Asia: Decoding the value and performance of corporate Asia*. Retrieved in 2023, August 8, from <https://www.mckinsey.com/featured-insights/asia-pacific/the-future-of-asia-decoding-the-value-and-performance-of-corporate-asia>
- Cahaya, F. R., & Hervina, R. (2019). Do human rights issues matter? An empirical analysis of Indonesian companies' reporting. *Social Responsibility Journal*, 15(2), 226-243. <http://dx.doi.org/10.1108/SRJ-10-2016-0171>.
- Chen, B., & Zhang, A. (2021). How does corporate social responsibility affect the cost of equity capital through operating risk? *Borsa Istanbul Review*, 21(Suppl), S38-S45. <http://dx.doi.org/10.1016/j.bir.2021.01.005>.
- Chen, C., Chen, Y., Hsu, P. H., & Podolski, E. J. (2016). Be nice to your innovators: employee treatment and corporate innovation performance. *Journal of Corporate Finance*, 39, 78-98. <http://dx.doi.org/10.1016/j.jcorpfin.2016.06.001>.
- Chung, R., Firth, M., & Kim, J. B. (2002). Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance*, 8(1), 29-48. [http://dx.doi.org/10.1016/S0929-1199\(01\)00039-6](http://dx.doi.org/10.1016/S0929-1199(01)00039-6).
- Dawar, N., & Pillutla, M. M. (2000). Impact of product-harm crises on brand equity: the moderating role of consumer expectations. *JMR, Journal of Marketing Research*, 37(2), 215-226. <http://dx.doi.org/10.1509/jmkr.37.2.215.18729>.
- Devie, D., Liman, L. P., Tarigan, J., & Jie, F. (2018). Corporate social responsibility, financial performance and risk in Indonesian natural resources industry. *Social Responsibility Journal*, 16(1), 73-90. <http://dx.doi.org/10.1108/SRJ-06-2018-0155>.
- Dhaliwal, D., Heitzman, S., & Li, O. Z. (2006). Taxes, leverage, and the cost of equity capital. *Journal of Accounting Research*, 44(4), 691-723. <http://dx.doi.org/10.1111/j.1475-679X.2006.00214.x>.
- Ducassy, I., & Guyot, A. (2017). Complex ownership structures, corporate governance and firm performance: the French context. *Research in International Business and Finance*, 39, 291-306. <http://dx.doi.org/10.1016/j.ribaf.2016.07.019>.
- Ekundayo, G., Jamani, N. J., & Odhigu, F. (2021). Environmental disclosure modelling in a developing economy: does corporate governance matter? A double hurdle regression approach. *International Journal of Financial Research*, 12(4), 111. <http://dx.doi.org/10.5430/ijfr.v12n4p111>.
- El Ghouli, S., Guedhami, O., Kwok, C. C. Y., & Mishra, D. R. (2011). Does corporate social responsibility affect the cost of capital? *Journal of Banking & Finance*, 35(9), 2388-2406. <http://dx.doi.org/10.1016/j.jbankfin.2011.02.007>.
- Emeseh, E., & Songi, O. (2014). CSR, Human rights abuse and sustainability report accountability. *International Journal of Law and Management*, 56(2), 136-151. <http://dx.doi.org/10.1108/IJLMA-01-2013-0001>.
- Faysal, S., Salehi, M., & Moradi, M. (2020). The impact of ownership structure on the cost of equity in emerging markets. *Management Research Review*, 43(10), 1221-1239. <http://dx.doi.org/10.1108/MRR-11-2019-0475>.
- Goss, A., & Roberts, G. S. (2011). The impact of corporate social responsibility on the cost of bank loans. *Journal of Banking & Finance*, 35(7), 1794-1810. <http://dx.doi.org/10.1016/j.jbankfin.2010.12.002>.
- Hamrouni, A., Uyar, A., & Boussaada, R. (2019). Are corporate social responsibility disclosures

- relevant for lenders? Empirical evidence from France. *Management Decision*, 58(2), 267-279. <http://dx.doi.org/10.1108/MD-06-2019-0757>.
- Hatane, S. E., & Soewarno, N. (2022). Corporate social responsibility and internationalisation in mitigating risk. *International Journal of Sustainable Society*, 14(3), 221-242. <http://dx.doi.org/10.1504/IJSSOC.2022.125647>.
- Hsieh, T. Y., Shiu, Y. M., & Chang, A. (2018). Does institutional ownership affect the relationship between accounting quality and cost of capital? A panel smooth transition regression approach. *Asia Pacific Management Review*, 24(4), 327-334. <http://dx.doi.org/10.1016/j.apmr.2018.12.002>.
- Huo, X., Lin, H., Meng, Y., & Woods, P. (2021). Institutional investors and cost of capital: the moderating effect of ownership structure. *PLoS One*, 16(4), e0249963. <http://dx.doi.org/10.1371/journal.pone.0249963>. PMID:33831116.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior agency cost and ownership structure. *Human Relations*, 72(10), 305-360. <http://dx.doi.org/10.1177/0018726718812602>.
- Kim, J., & Park, T. (2020). How corporate social responsibility (CSR) saves a company: the role of gratitude in buffering vindictive consumer behavior from product failures. *Journal of Business Research*, 117, 461-472. <http://dx.doi.org/10.1016/j.jbusres.2020.06.024>.
- Li, Y., Eddie, I., & Liu, J. (2014). Carbon emissions and the cost of capital: Australian evidence. *Review of Accounting and Finance*, 13(4), 400-420. <http://dx.doi.org/10.1108/RAF-08-2012-0074>.
- Liu, B., Sun, P. Y., & Zeng, Y. (2020). Employee-related corporate social responsibilities and corporate innovation: evidence from China. *International Review of Economics & Finance*, 70, 357-372. <http://dx.doi.org/10.1016/j.iref.2020.07.008>.
- Magnanelli, B. S., & Izzo, M. F. (2017). Corporate social performance and cost of debt: the relationship. *Social Responsibility Journal*, 13(2), 250-265. <http://dx.doi.org/10.1108/SRJ-06-2016-0103>.
- Mirvis, P., Herrera, M. E. B., Googins, B., & Albareda, L. (2016). Corporate social innovation: how firms learn to innovate for the greater good. *Journal of Business Research*, 69(11), 5014-5021. <http://dx.doi.org/10.1016/j.jbusres.2016.04.073>.
- Mitra, S., & Cready, W. M. (2005). Institutional stock ownership, accrual management, and informing environment. *Journal of Accounting, Auditing & Finance*, 20(3), 257-286. <http://dx.doi.org/10.1177/0148558X0502000304>.
- Mohammed, A., & Al-Swidi, A. (2019). The influence of CSR on perceived value, social media and loyalty in the hotel industry. *Spanish Journal of Marketing - ESIC*, 23(3), 373-396. <http://dx.doi.org/10.1108/SJME-06-2019-0029>.
- Nurteni, N., & Bandang, A., Darmawati, & Amiruddin, A. (2018). The effect of managerial and institutional ownership on corporate social responsibility disclosure. *International Journal of Law and Management*, 60(4), 979-987. <https://doi.org/https://doi.org/10.1108/IJLMA-03-2017-0078>
- O'Dwyer, B. (2003). Conceptions of corporate social responsibility: the nature of managerial capture. *Accounting, Auditing & Accountability Journal*, 16(4), 523-557. <http://dx.doi.org/10.1108/09513570310492290>.
- Panda, B., & Leepsa, N. M. (2019). Does institutional ownership engagement matter for greater financial performance? Evidence from a developing market. *International Journal of Law and Management*, 61(2), 359-383. <http://dx.doi.org/10.1108/IJLMA-09-2017-0228>.
- Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., & de Colle, S. (2010). Stakeholder theory: the state of the art. *The Academy of Management Annals*, 4(1), 403-445. <http://dx.doi.org/10.5465/19416520.2010.495581>.
- Qiu, S. C., Jiang, J., Liu, X., Chen, M.-H., & Yuan, X. (2021). Can corporate social responsibility

- protect firm value during the COVID-19 pandemic? *International Journal of Hospitality Management*, 93, 102759. <http://dx.doi.org/10.1016/j.ijhm.2020.102759>. PMID:36919172.
- Rajgopal, S., & Venkatachalam, M. (1997). The role of institutional investors in corporate governance: an empirical investigation. *SSRN Electronic Journal*, 1436, 1-11. <http://dx.doi.org/10.2139/ssrn.130901>.
- Saci, F., & Jasimuddin, S. M. (2020). Does the research done by the institutional investors affect the cost of equity capital? *Finance Research Letters*, 41, 101834. <http://dx.doi.org/10.1016/j.frl.2020.101834>.
- Salehi, M., Tarighi, H., & Rezanezhad, M. (2017). The Relationship between board of directors' structure and company ownership with corporate social responsibility disclosure: iranian angle. *Humanomics*, 33(4), 398-418. <http://dx.doi.org/10.1108/H-02-2017-0022>.
- Shin, H., Sharma, A., Luis Nicolau, J., & Kang, J. (2021). The impact of hotel CSR for strategic philanthropy on booking behavior and hotel performance during the COVID-19 pandemic. *Tourism Management*, 85, 104322. <http://dx.doi.org/10.1016/j.tourman.2021.104322>. PMID:34815613.
- Suto, M., & Takehara, H. (2017). CSR and cost of capital: evidence from Japan. *Social Responsibility Journal*, 13(4), 798-816. <http://dx.doi.org/10.1108/SRJ-10-2016-0170>.
- Trianaputri, A. R., & Djakman, C. D. (2019). Quality of sustainability disclosure among the Asean-5 countries and the role of stakeholders. *Jurnal Akuntansi Dan Keuangan Indonesia*, 16(2), 180-205. Retrieved in 2023, August 8, from <https://scholarhub.ui.ac.id/jaki/vol16/iss2/4/>
- Tripadvisor. (2021). *New Insights on Today's Asian Travelers. TripAdvisor Insights*. Retrieved in 2023, August 8, from <https://www.tripadvisor.com/TripAdvisorInsights/w752>
- World Business Council for Sustainable Development – WBCSD. (2017). *International environmental management benchmarks*. Geneva: WBCSD.
- Yang, E. C. L., & Ong, F. (2020). Redefining Asian tourism. *Tourism Management Perspectives*, 34, 100667. <http://dx.doi.org/10.1016/j.tmp.2020.100667>.
- Yu, Y., & Choi, Y. (2014). Corporate social responsibility and firm performance through the mediating effect of organizational trust in Chinese firms. *Chinese Management Studies*, 8(4), 577-592. <http://dx.doi.org/10.1108/CMS-10-2013-0196>.

Authors contribution

Saarce Elsy Hatane was responsible for designing and writing this study. Noorlailie Soewarno supervised the study.

Appendix 1. The Items in CSR Disclosures.

Category	Strengths	Concerns
Community	Generous giving	Investment controversies
	Innovative giving	Negative economic impact
	Housing support	Indigenous people relations
	Education support	Tax disputes
	People relations	Other concerns
	Voluntary programs	
	Other strengths	
Corporate governance	Limited compensation	High compensation
	Ownership strength	Ownership concern
	Transparency strength	Transparency concern
	Accountability strength	Accountability concern
	Public policy strength	Public policy concern
	Other strengths	Other concerns
Diversity	CEO	Controversies
	Promotion	Non-representation
	Board of directors	Other concerns
	Work-life benefits	
	Women and minority	
	Employment of the disabled	
	Gay dan lesbian policies	
Employee Relations	Other strengths	
	Union relations	Union relations
	No-layoff policy	Health and safety concern
	Cash profit sharing	Workforce reductions
	Employee involvement	Retirement benefits concern
	Retirement benefits	Other concerns
	Health and safety	
Environment	Other strengths	
	Beneficial products	Hazardous waste
	Pollution prevention	Regulatory problems
	Recycling	Ozone depleting chemicals
	Clean energy	Substantial emissions
	PPE	Agriculture chemicals
Human rights	Other strengths	Climate change
	Other strengths	Other concerns
	Positive record	Labor right concern
	Indigenous people relations	Indigenous people relations concern
Products	Labor rights strength	Other concerns
	Other strengths	
	Quality	Product safety concern
	R&D innovation	Marketing contracting concern
	Benefits to economically disadvantage	Antitrust
	Other strengths	Other concerns