



DOES CONCENTRATED OWNERSHIP MATTER? MODERATING THE LINK BETWEEN LIQUIDITY AND CSR

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Info Article Received : 01 April 2026 Revised : 03 Mei 2026 Accepted : 01 Juni 2026 Publication : 29 Juni 2026	Abstract: <i>With ownership concentration acting as a moderating variable, this research investigates the relationship between working capital efficiency measured by the cash conversion cycle (CCC) and CSR performance in light of the importance of CSR activities in sustainable business strategies. Panel regression in STATA 17 was used to analyze 162 non-financial companies listed on the Indonesia Stock Exchange between 2018 and 2023 using purposive selection. The findings indicate that ownership concentration exacerbates this negative relationship, whereas a shorter CCC (more liquidity) enhances CSR performance. The results show that working capital management is linked to financial efficiency and is a strategic instrument for establishing long-term legitimacy and complying with regulatory obligations. The research emphasizes how important it is for management, stakeholders, and regulators to assess ownership structure and liquidity in order to promote sustainable business practices, especially in developing markets like Indonesia.</i> Abstrak: Dengan konsentrasi kepemilikan sebagai variabel moderasi, penelitian ini mengkaji hubungan antara efisiensi modal kerja yang diukur dengan cash conversion cycle (CCC) dan kinerja CSR dalam konteks pentingnya aktivitas CSR dalam strategi bisnis berkelanjutan. Regresi data panel menggunakan STATA 17 digunakan untuk menganalisis 162 perusahaan non-keuangan yang terdaftar di Bursa Efek Indonesia selama periode 2018–2023 dengan menggunakan teknik purposive sampling. Hasil penelitian menunjukkan bahwa konsentrasi kepemilikan memperburuk hubungan negatif tersebut, sedangkan CCC yang lebih pendek (likuiditas yang lebih tinggi) meningkatkan kinerja CSR. Hasil ini menunjukkan bahwa manajemen modal kerja tidak hanya terkait dengan efisiensi keuangan, tetapi juga merupakan instrumen strategis untuk membangun legitimasi jangka panjang dan memenuhi kewajiban regulasi. Penelitian ini menekankan pentingnya bagi manajemen, pemangku kepentingan, dan regulator untuk menilai struktur kepemilikan dan likuiditas guna mendorong praktik bisnis berkelanjutan, terutama di pasar berkembang seperti Indonesia.
Keywords: Liquidity, Cash Conversion Cycle, Corporate Social Responsibility (CSR) Performance, Ownership Concentration. Kata Kunci: Likuiditas, Siklus Konversi Kas, Kinerja Corporate Social Responsibility (CSR), Kepemilikan Terkonsentrasi	
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INTRODUCTION

A company's long-term viability is at risk if it can't effectively implement or explain Corporate Social Responsibility (CSR), which may harm its brand, drive away consumers, erode stakeholder confidence, and result in penalties from authorities (Handoyo & Anas, 2024; Jiang et al., 2022). Inadequate implementation of Corporate Social Responsibility (CSR) is shown by the events involving PT Freeport Indonesia and PT Lapindo Brantas that led to environmental damage and human casualties (Fatimah, 2021). Over time, corporate social responsibility, or CSR, has evolved from a fundamental moral obligation to a strategic need for businesses looking to maintain their competitiveness, legitimacy, and market position. A company's ability to fulfill its corporate social responsibility (CSR) obligations is significantly impacted by its operational and financial standing. One of the most crucial metrics for assessing how well a business manages its working capital is the Cash Conversion Cycle (CCC). It illustrates the time it takes for funds invested in receivables and inventories to be converted into cash (Stavropoulos & Zounta, 2025). Businesses with a shorter Cash Conversion Cycle (CCC) often have more cash on hand and more discretion over their spending, allowing them to maximize their resources, particularly for CSR initiatives.

A company's ability to fulfill its corporate social responsibility (CSR) obligations is significantly impacted by its operational and financial standing. One of the most crucial metrics for assessing how well a business manages its working capital is the Cash Conversion Cycle (CCC). It illustrates the time it takes for funds invested in receivables and inventories to be converted into cash (Stavropoulos & Zounta, 2025). Businesses with a shorter Cash Conversion Cycle (CCC) often have more cash on hand and more discretion over their spending, allowing them to maximize their resources, particularly for CSR initiatives.

According to Uyar et al. (2023), empirical research on the relationship between liquidity and CSR is still in its infancy. There are contradictory findings since most research focuses on market liquidity rather than accounting liquidity (Tan & Tuluca, 2024; Uyar et al., 2023). Chang et al. (2019) demonstrate that CSR involvement is negatively impacted by stock liquidity. According to Tan and Tuluca (2024), a company's ESG score is adversely impacted by liquidity. On the other hand, Uyar et al. (2023) provide evidence that liquidity, as measured by the Cash Conversion Cycle (CCC), improves CSR performance.

These differences suggest that the relationship between liquidity and CSR may depend on certain organizational factors that influence how firms communicate and utilize their resources. From the perspective of signaling theory, CSR activities represent a signal delivered by companies to stakeholders regarding their commitment to sustainability, responsible practices, and long-term value creation (Uyar et al., 2023). The existence of moderating variables that influence this association is suggested by the variation in previous study results. By include concentrated ownership as a moderating variable, this research seeks to reevaluate the connection between liquidity, as determined by the Cash Conversion Cycle (CCC), and CSR performance.

By using ownership concentration, as a moderating variable in the link between liquidity, as measured by the cash conversion cycle (CCC), and CSR performance, this study expands on earlier research (Uyar et al., 2023). When a small number of investors have significant influence and control over business choices, concentrated ownership occurs (Alhababsah, 2019). By highlighting the long-term advantages of sustainability initiatives, this article argues that concentrated ownership may improve the implementation of Corporate Social Responsibility (CSR). Therefore, evaluating the extent to which corporate social responsibility (CSR) enhances company performance—specifically, operational efficiency, as measured by the Cash Conversion Cycle (CCC)—requires looking at the moderating effect of concentrated ownership.

The majority of earlier studies were conducted in developed countries with better established sustainability laws, fragmented equity ownership, and rather stable capital markets (Chang et al., 2019). Concentrated ownership structures, mandatory corporate social responsibility (CSR) obligations for resource-dependent businesses, and specific governance challenges pertinent to emerging markets are some of the distinctive features of the institutional framework of developing economies like Indonesia (Akben-Selcuk, 2019; Bing & Li, 2019). The relationship between liquidity and CSR may be impacted by contextual differences, hence further study in Indonesia is required to fill this empirical gap.

Three contributions are made by this research. By introducing a corporate governance perspective via the moderating impact of concentrated ownership on the relationship between liquidity, as shown by the cash conversion cycle, and CSR performance—a relationship that has never been examined before—it first provides a theoretical enhancement. Therefore, this study moves beyond examining the direct effect of liquidity on CSR by explaining the governance condition under which liquidity

becomes a stronger signal for CSR engagement. Second, by using examples from Indonesia, a developing nation with distinct laws governing share ownership and corporate social responsibility, it enhances the context (Bing & Li, 2019; Wulandari & Setiawan, 2023). Third, practical contributions provide management, investors, and regulators with guidance on liquidity management. This is significant because ownership structure influences both strategic choices in social activity and financial efficiency.

This study confirms that corporate liquidity is a strategic component of corporate social responsibility in addition to being linked to financial efficiency. The relationship between financial factors, governance, and company sustainability is made clearer by looking at concentrated ownership as a moderating element.

To ensure that everyone is aware of the same information, companies (insiders) transmit signals to people outside the organization, according to signaling theory (Moratis, 2018; Spence, 1973). Signs or representations conveyed from one entity to another are called signals (Moratis, 2018). One crucial indicator of a company's health is its liquidity (Amosh et al., 2022). Businesses with greater cash on hand are better able to fund CSR initiatives, and they often do so to demonstrate to stakeholders their progress (Uyar et al., 2023).

Companies may reduce information asymmetry between management and stakeholders and enhance their reputation by using CSR disclosure as a signaling technique to convey their improved social and environmental performance (Bing & Li, 2019; Uyar et al., 2023). A company is doing well financially if it has a high degree of liquidity (Haninun et al., 2018). Businesses demonstrate their financial success, environmental concern, and social responsibility by putting CSR into practice.

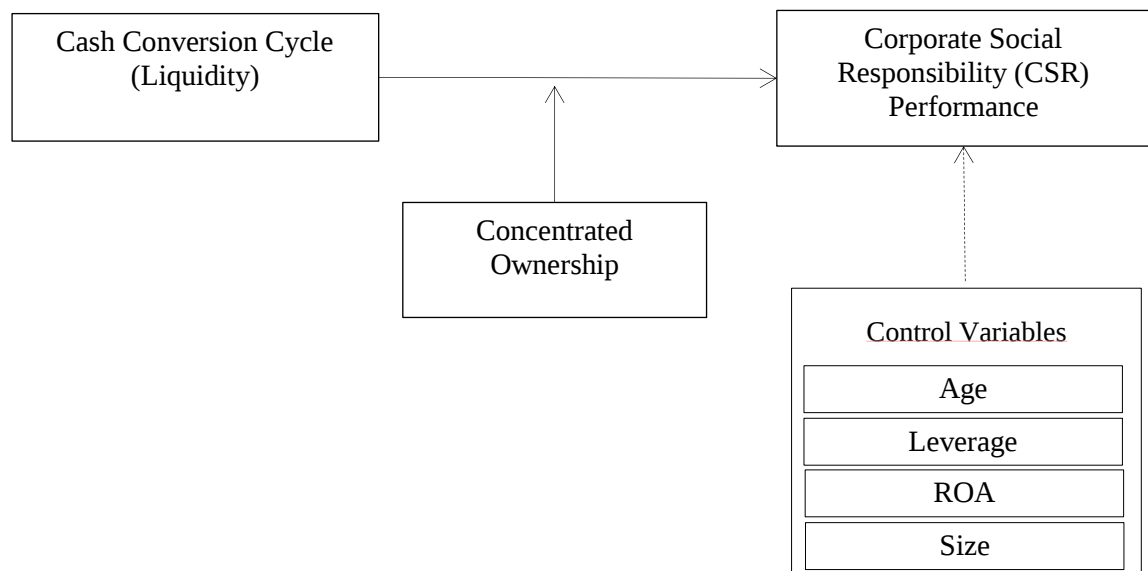
While Amosh et al. (2022) observed a positive effect of liquidity on integrated reporting, Gunardi et al. (2016) found that liquidity had no effect on CSR disclosure. According to Uyar et al. (2023), CSR is negatively impacted by liquidity as measured by the cash conversion cycle (CCC). This suggests that a lower CCC (signaling improved liquidity) is associated with a higher investment in CSR performance.

Based on signaling theory and prior empirical data, this paper argues that businesses with more liquidity—as shown by a lower Cash Conversion Cycle (CCC) are more likely to enhance their CSR performance and send a positive signal to stakeholders. The following theory is proposed in light of the theoretical framework and prior empirical data.

H1: There is a negative association between the cash conversion cycle and CSR performance.

This study argues that, in accordance with signal theory, a company's ownership structure has a major impact on how well it communicates with stakeholders. When a small number of shareholders possess significant power over the business, this is known as concentrated ownership (Alhababsah, 2019; Ghazali, 2007). Concentrated ownership in these situations has increased incentives and power to influence management choices, including CSR-related strategic choices (Bhimavarapu et al., 2022; Crisóstomo & Freire, 2015).

Prior research indicates that a long-term outlook and a greater focus on social reputation are often associated with concentrated ownership (Crifo et al., 2016; Lin & Nguyen, 2022). According to empirical data presented by Aboud and Yang (2022), concentrated ownership improves CSR performance. In this case, concentrated ownership makes it simpler to deploy excess funds for CSR initiatives when businesses have a shorter Cash Conversion Cycle (high liquidity). This demonstrates to stakeholders the company's dedication to sustainability. With the goal of supplying a more thorough understanding of the intricate relationships between ownership structure, management decision-making, and corporate commitment to sustainability, this research aims to clarify the impact of concentrated ownership on CSR practices in Indonesia.



Source: Research Data, 2026

Figure 1 Research Model

Based on prior research and signaling theory, this study proposed that concentrated ownership exacerbates the negative relationship between CSR performance and liquidity efficiency, as measured by the Cash Conversion Cycle (CCC). This suggests that a

stronger desire to employ liquidity efficiency to improve CSR performance is linked to higher ownership concentration. Based on the above claims, the second hypothesis is put out as follows.

H2: The negative association between the cash conversion cycle and CSR performance is moderated by concentrated ownership.

METHOD

This research uses a quantitative technique and a verification design. The Thomson Reuters Eikon Refinitiv database, Stockbit, the Indonesia Stock Exchange (IDX) website, and each company's annual reports from 2018 to 2023 were the sources of secondary data used in this research. Because financial organizations exhibit unique traits in business strategy and operational reporting, this study focuses on non-financial firms (Bhimavarapu et al., 2022). Over the course of six years, a research sample of 27 organizations was gathered using a purposive sampling technique, resulting in a final total sample size of 162.

The use of purposive sampling may raise concerns regarding potential selection bias because the final sample only includes firms with complete and accessible data. Companies with incomplete CSR Score and financial information were excluded, which may lead to differences between included and excluded firms. To minimize this concern, the selection criteria were applied consistently to all companies, and the sample was drawn from publicly listed non-financial firms with continuous reporting during the research period.

Although the sample size is relatively limited compared with the total population of listed companies, the sample remains relevant for this study because the research focuses on firms that provide CSR Score and financial information required to test the proposed model. Furthermore, the use of panel data over six years increases the number of observations and allows the study to capture variations in firm behavior over time. How to determine the final research sample is shown in Table 1.

Table 1 Sample Selection Procedure

Criteria	Number
Non-financial companies listed on the IDX in the years 2018–2023	852
Reduced: did not disclose CSR strategy score in 2018–2023	(825)
Number of samples that meet the criteria (N)	27
Year of observation	6
Final sample size (N × 6)	162

Source: Research data, 2026

The dependent variable in this research was corporate social responsibility (CSR) performance. The degree to which a company integrates economic, social, and environmental considerations into its strategy and operational decisions is measured by the CSR Strategy Score, which assesses CSR success (Padungsaksawasdi & Treepongkaruna, 2024). The range of the CSR strategy score is 0 to 1 (Thomson Reuters, 2017). Better CSR performance is indicated by a higher score.

Liquidity serves as an independent variable in the research. The Cash Conversion Cycle (CCC), which measures the time required to convert investments in inventory and receivables into cash inflows, is used in this research to assess liquidity (Stavropoulos & Zounta, 2025). People are aware that a company's liquidity may be gauged using the cash conversion cycle (Wang, 2019). CCC is used as a liquidity proxy because it reflects the firm's operational ability to convert working capital investments into cash. In addition, CCC captures the company's ability to manage sales, cash collections, and payments, while reflecting the quality of relationships with customers and creditors as key stakeholders (Uyar et al., 2023). A corporation with a shorter cash conversion cycle (CCC) has more cash on hand. The following formula may be used to determine the CCC. (Lin & Lin, 2021; Uyar et al., 2023).

1. $CCC = \text{Days of Sales Outstanding (DSO)} + \text{Days of Sales Inventory (DSI)} - \text{Days of Payables Outstanding (DPO)}$
2. $\text{Days of Sales Outstanding (DSO)} = \frac{\text{Accounts Receivables}}{\frac{\text{Sales}}{365}}$
3. $\text{Days of Sales Inventory (DSI)} = \frac{\text{Inventories}}{\frac{\text{Cost of Goods Sold}}{365}}$
4. $\text{Days of Payables Outstanding (DPO)} = \frac{\text{Accounts Payables}}{\frac{\text{Cost of Goods Sold}}{365}}$

Concentrated ownership, defined as the proportion of all outstanding shares owned by the top three shareholders, is used as a moderating variable in this analysis (Zouari & Dhifi, 2022). Control variables were also included in this research, including firm age, which is the number of years from the company's founding to the observation year (Primacintya & Kusuma, 2025). According to Soeprajitno et al. (2024), leverage was calculated by dividing the total liabilities for the current period by the total assets for the prior period. A company's profitability is determined by its Return on Assets (ROA) ratio. Net profit after taxes is divided by total assets to arrive at this figure (Velte, 2023).

The natural logarithm of a company's total assets is used to calculate its size (Gerged et al., 2023).

Two regression equations are used in this research to assess the hypotheses. The empirical connection between the cash conversion cycle and the effectiveness of corporate social responsibility (CSR) is shown by equation (1). The purpose of equation (2) is to assess how ownership concentration affects the relationship between the cash conversion cycle and CSR performance. The following is the definition of the regression equations.

$$CSR_{it} = \alpha + \beta_1 CCC_{it} + \beta_2 AGE_{it} + \beta_3 LEV_{it} + \beta_4 ROA_{it} + \beta_5 SIZE_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

$$CSR_{it} = \alpha + \beta_1 CCC_{it} + \beta_2 CO_{it} + \beta_3 CCC * CO_{it} + \beta_4 AGE_{it} + \beta_5 LEV_{it} + \beta_6 ROA_{it} + \beta_7 SIZE_{it} + \varepsilon_{it} \dots \dots \dots (2)$$

Explanation:

CSR_{it}	=	The company's CSR performance measured using the CSR strategy score.
CCC_{it}	=	Liquidity measured using the cash conversion cycle.
CO_{it}	=	Concentrated ownership is operationalized as the proportion of shares held by the three largest shareholders in relation to the firm's
AGE_{it}	=	Company age is operationalized as the difference between the year of observation and the year of establishment.
LEV_{it}	=	Total liabilities for the current period divided by total assets for the previous period.
RoA_{it}	=	Return on assets
$SIZE_{it}$	=	Natural logarithm (Ln) of total assets.
$\beta_1 - \beta_7$	=	Regression equation coefficient.
ε_{it}	=	Error term.

STATA software version 17 was used to analyze balanced panel data for this research. Given that the study sample contains both firm-specific features (panel dimension) and temporal fluctuations (time dimension), panel data regression was chosen as the best analytical technique (Gerged et al., 2023). Model specification tests were conducted to determine the best estimate before evaluating the study hypotheses (Uyar et al., 2023). To determine the optimal panel data estimate model, we use the Chow, Hausman, and Lagrange Multiplier tests.

RESULTS AND DISCUSSION

Results and discussion section contain about the results of the study that an answers analysis based on research objectives that have been stated in the introduction. Explanations can use pictures/graphs/tables to facilitate visualization.

Table 2 shows the descriptive statistics for the research variables. Table 2 shows that the average Corporate Social Responsibility (CSR) performance value is 0.488. This means that, on average, companies have a reasonably good level of CSR performance (Saputra & Rahman, 2024). The average ownership concentration (CO) is 0.622, which means that the businesses studied had a lot of ownership concentrated in a few hands. This is in line with the ownership patterns that are widespread in Indonesian enterprises (Wulandari & Setiawan, 2023). The average liquidity (CCC) value is 2237.992.

Table 2 Descriptive Statistics

Variable	Mean	Std. dev.	Min	Max
CSR	0.488	0.324	0.000	0.994
CCC	2237.992	13870.480	-539.227	12,7221.800
CO	0.622	0.132	0.175	0.856
Age	47.765	27.559	14.000	164.000
Lev	0.531	0.301	0.011	1.722
ROA	0.078	0.089	-0.171	0.447
Size	17.686	0.962	15.391	19.915
Sample	162			

Source: Research data, 2026

The Pearson correlation matrix for the study's variables is shown in Table 3. According to Khidmat et al. (2020), multicollinearity is absent when the correlation value is less than 0.8. The highest correlation value in Table 3 is 0.240, indicating that multicollinearity is not an issue in this investigation.

Table 3 Pearson's Correlation Matrix

	CSR	CCC	CO	AGE	LEV	ROA	SIZE
CSR	1.000						
CCC	-0.067	1					
CO	0.240	0.099	1				
AGE	0.128	-0.171	0.097	1			
LEV	-0.044	0.139	0.010	0.115	1		
ROA	0.224	-0.079	0.057	0.089	-0.008	1	
SIZE	0.045	-0.024	0.059	0.191	0.131	-0.265	1

Source: Research data, 2026

The regression results for Equation (1) are shown in Table 4. The panel data diagnostic tests reveal that the Breusch–Pagan test for the Random Effects (RE) model

and the Chow test for the Fixed Effects (FE) model provide probability values below 0.05 ($p = 0.000 < 0.05$). By distinguishing between the Fixed Effects (FE) and Random Effects (RE) estimators, the Hausman test was used to determine the appropriate model specification. The Fixed Effects (FE) model is the best estimator, according to the test result, which displays a probability value less than 0.05.

In fixed-effects panel data models, group-specific heteroscedasticity is detected using the Modified Wald test. If the probability value is below 0.05, heteroscedasticity exists in the model (Bhimavarapu et al., 2022). The Modified Wald test results in this study indicate the presence of heteroscedasticity in equation (1), as shown by the probability value of 0.000, which is lower than the 0.05 significance level ($p = 0.000 < 0.05$). To handle heteroscedasticity and ensure the reliability of the regression results, the study employs strict estimating techniques using robust (Gerged et al., 2023; Wooldridge, 2020).

The F-test yields a p-value of 0.000 and an F-statistic of 2676.86, both of which are below the significance threshold of 0.05. This signifies that the model is statistically significant as a whole. This research demonstrates that when combined, the independent factors have a statistically significant impact on CSR performance. The model explains around 30.2% of the variations in CSR performance, according to the R-squared value of 0.302.

With a coefficient of -3.750 and a p-value of 0.000 (< 0.05), the fixed-effects regression findings show that liquidity, as measured by the Cash Conversion Cycle (CCC), has a negative and statistically significant impact on CSR performance. This result supports the first hypothesis by showing that businesses with shorter cash conversion cycles, which indicate more liquidity, often perform better in terms of corporate social responsibility.

These results highlight how good working capital management increases financial flexibility and strengthens the company's capacity to devote resources to environmental and social goals. As a gauge of CSR effectiveness, this research used Thomson Reuters' CSR Strategy Score, which takes into account social, economic, and environmental factors when making strategic decisions (Padungsaksawasdi & Treepongkaruna, 2024). Therefore, rather than only performing symbolic actions, the results of this research confirm that companies with significant liquidity are more likely to incorporate social and environmental obligations into their commercial strategy.

These findings are consistent with signaling theory, which holds that in order to reduce information asymmetry, companies (insiders) send signals to outside parties (Michael, 1973; Moratis, 2018). A formal indicator of how well a firm has planned and implemented its sustainability strategy in day-to-day operations is the CSR plan score. According to decision-makers, the financial results of the corporation are enhanced by the economic benefits of social responsibility, environmental preservation, and governance (Saputra & Rahman, 2024).

Businesses in Indonesia must be transparent about their CSR since the public and government strongly want them to do so. These results highlight the crucial role that sustainability initiatives play in a variety of industries and support government efforts to accomplish the 17 Sustainable Development Goals (SDGs) set out by the UN (Primacintya & Kusuma, 2025). The importance of sustainability is emphasized in the Otoritas Jasa Keuangan (OJK) strategy. According to Peraturan Otoritas Jasa Keuangan (POJK) No. 51/POJK.03/2017 on the implementation of sustainable finance, publicly listed enterprises must come up with and put into effect sustainable finance concepts in their corporate operations (POJK, 2017). An indicator of efficient working capital is a rapid cash conversion cycle (CCC). This enables businesses to fulfill their governmental responsibilities since having more cash on hand enables them to fund environmental and social projects that improve CSR performance.

This study's results are consistent with those of Uyar et al. (2023), who used a global sample and found that the cash conversion cycle had a negative effect on CSR. Businesses with liquid financial situations are more likely to boost CSR disclosures in order to enhance stakeholder assessments, according to Aulia & Setyorini (2021). Businesses with large financial reserves are better equipped to fulfill their CSR responsibilities and satisfy the needs of a society that is more concerned with environmental concerns. Therefore, by striking a balance between social responsibility and economic efficiency, businesses may increase the confidence of investors and the general public.

The implications of these results may be seen in two ways. By showing that CSR performance functions as a corporate communication method to convey financial stability and commitment to sustainability, the study's findings conceptually corroborate signaling theory (Uyar et al., 2023). Working capital efficiency is a dual technique that Indonesian corporate management may use to provide financial stability and build social trust. These studies provide regulators—most notably the OJK—empirical proof that a

company's financial situation influences its compliance with sustainability regulations. Additionally, Table 4 shows that although the firm size (SIZE) variable has a negative correlation with CSR performance, the profitability control variable (ROA) has a high and positive correlation. CSR performance was unaffected by the control variables of company age (AGE) and leverage (LEV).

Table 4 Regression Results for Equation (1) – Fixed Effects Model

Variable	Coefficient	t-statistic	Sig.
<i>Part A (Coefficient analysis)</i>			
<i>Dependent Variable: CSR</i>			
CCC	-3.750	-7.08	0.000**
AGE	-0.023	-1.68	0.106
LEV	0.123	0.46	0.647
ROA	0.656	3.75	0.001**
SIZE	-0.310	-2.27	0.032**
Constant	6.992	3.77	0.001
<i>Part B (Model estimates)</i>			
F test	2676.860		0.000
R-Squared	0.302		
Observations	162.000		
Chow test	0.000		
Hausman test	0.000		
Breusch-Pagan test	0.000		
Wald test for heteroscedasticity	0.000		
Notes: ** significance at 5% level CCC (cash conversion cycle); AGE (age of the company); LEV (leverage); ROA (profitability); SIZE (company size); CSR (CSR performance).			

Source: Research data, 2026

Table 5 displays the findings of the regression analysis for Equation (2). Both the Chow test, which evaluates the Fixed Effects (FE) model, and the Breusch–Pagan test, which evaluates the Random Effects (RE) model, provide probability values below the 0.05 significant threshold ($p = 0.000 < 0.05$), according to the panel data model's diagnostics. The optimum model specification was then determined by separating the Fixed Effects (FE) and Random Effects (RE) estimators using the Hausman test. The Fixed Effects (FE) model is the best estimator, as shown by the probability value being less than 0.05.

Groupwise heteroscedasticity in fixed-effects panel data models is examined using the Modified Wald test. When the probability is more than 0.05 ($0.000 < 0.05$), there is no heteroscedasticity (Bhimavarapu et al., 2022). Heteroscedasticity is evident from the Wald test findings in equation (1), which reveal a probability value below the 0.05 cutoff ($p = 0.000 < 0.05$). To handle heteroscedasticity and ensure the reliability of the

regression results, the study employs strict estimating techniques (Gerged et al., 2023; Wooldridge, 2020).

The complete regression model's statistical significance is confirmed by the F-test, which produces an F-statistic of 17,357.13 and a p-value of 0.000, both of which are below the 0.05 significance level. This indicates that when considered together, the explanatory factors have a significant impact on CSR performance. The model explains about 35.6% of the overall change in CSR performance, according to the R-squared value of 0.356.

The fixed-effects regression analysis reveals that ownership concentration (CO) has a large influence on the link between liquidity (measured by the Cash Conversion Cycle, or CCC) and CSR performance. More ownership concentration strengthens the negative relationship between CCC and CSR performance, as seen by the negative coefficient (-0.000) and p-value of 0.000 (< 0.05).

The change in the coefficient of CCC from negative in the baseline model to positive after including the moderating variable should be interpreted with caution. In the moderated model, the coefficient of CCC represents the effect of CCC when ownership concentration is equal to zero, while the overall effect of CCC on CSR depends on the interaction term (CCC*CO). Therefore, the significant negative coefficient of the interaction term indicates that ownership concentration significantly changes the relationship between CCC and CSR performance. The negative and significant coefficient of CCC*CO indicates that ownership concentration strengthens the negative relationship between CCC and CSR performance.

Companies are more likely to increase short-term liquidity efficiency (by decreasing the CCC) in order to free up more funds for CSR initiatives when controlling shareholders have a voice in strategic choices. The second hypothesis is supported by the empirical results, which show that ownership concentration has a considerable impact on the negative connection between CSR performance and liquidity efficiency as measured by the Cash Conversion Cycle (CCC).

The results are consistent with signaling theory, which holds that businesses implement CSR programs to reduce information asymmetry and foster positive stakeholder perceptions (Spence, 1973; Moratis, 2018). According to earlier research, corporate decision-making is impacted by concentrated ownership (Bhimavarapu et al., 2022). According to Rastogi et al. (2025), a higher ownership share results in greater concentration, which grants more authority and influence over the governance and

strategic direction of the organization. Furthermore, businesses with concentrated ownership structures are more motivated to preserve their long-term reputation and legality (Bhimavarapu et al., 2022; Crisóstomo & Freire, 2015). Therefore, it can be simpler to employ more funds to improve CSR performance if there is a lot of ownership.

Families or individual stakeholders are often represented on the boards of directors of companies with concentrated ownership structures. Strategic choices may be impacted by this, particularly in relation to CSR initiatives (Lawati & Sanad, 2023). Concentrated ownership in this situation can encourage businesses to implement CSR and sustainability initiatives as a long-term tactic to safeguard their reputation and social standing.

The interpretation of these results is significantly nuanced by the Indonesian context. The majority of Indonesian companies are operated by huge corporate groups or family firms, resulting in a concentrated ownership structure (Wulandari & Setiawan, 2023). This is supported by OECD statistics from 2022. It demonstrates that other publicly listed firms control about 25% of Indonesia's publicly traded enterprises. In this situation, strategic choices on CSR are most influenced by the long-term goals of the primary shareholders. The study's findings support the legislative framework outlined in POJK No. 51/2017 regarding sustainable finance by showing that internal pressure from concentrated ownership is crucial for incorporating CSR into corporate strategy (POJK, 2017). This study supports prior research showing that CEOs' preferences for policies that promote green innovation and improve corporate sustainability are influenced by concentrated ownership (Asni & Agustia, 2022). CSR is favorably impacted by concentrated ownership, as shown by Aboud & Yang (2022).

The idea that concentrated ownership serves as a governance instrument that encourages long-term focus and economic sustainability is theoretically supported by this research (Lin & Nguyen, 2022). The potential of businesses to improve their CSR performance is boosted by improved working capital management (shorter CCC), according to empirical research. This link is further reinforced by concentrated ownership. This research underlines the requirement of refining ownership structures and financial processes to employ CSR as a strategic instrument for increasing reputation and producing sustainable value for firms. Additionally, Table 5 demonstrates that although the firm size variable (SIZE) has a weak and negative association with CSR performance, the profitability control variable (ROA) has a substantial and positive link.

CSR performance was unaffected by the control variables of company age (AGE) and leverage (LEV).

Table 5 Regression Results for Equation (2) – Fixed Effects Model

Variable	Coefficient	t-statistic	Sig.
<i>Part A (Coefficient analysis)</i>			
<i>Dependent Variable: CSR Performance</i>			
CCC	0.000	9.63	0.000
CO	-0.472	-1.21	0.239
CCC*CO	-0.000	-7.61	0.000**
AGE	-0.022	-1.56	0.130
LEV	0.167	0.64	0.529
ROA	0.646	3.82	0.001**
SIZE	-0.329	-2.37	0.025**
Constant	7.492	3.82	0.001
<i>Part B (Model estimates)</i>			
F test	17357.13		0.000
R-Squared	0.356		
Observations	162		
Chow test	0.000		
Hausman test	0.000		
Breusch-Pagan test	0.000		
Wald test for heteroscedasticity	0.000		
Notes: ** significance at 5% level CCC (cash conversion cycle); CO (concentrated ownership); AGE (age of company); LEV (leverage); ROA (profitability); SIZE (company size).			

Source: Research data, 2026

CONCLUSION

Because sufficient liquidity gives businesses the financial resources to carry out CSR projects in a sustainable manner, the empirical results show that working capital efficiency, as measured by the Cash Conversion Cycle (CCC), enhances CSR performance. The link between the cash conversion cycle and CSR performance has also been shown to be impacted by concentrated ownership, which is consistent with the ownership patterns of Indonesian companies. The results have consequences for theory and practice. By demonstrating that working capital efficiency—as shown by a shorter cash conversion cycle—is a trustworthy indicator of an organization's financial health and that ownership concentration amplifies this influence on CSR performance, they theoretically advance signaling theory. The results highlight how important it is for managers, stakeholders, and regulators to include ownership structure and working capital efficiency into laws that support sustainable business practices, especially in developing countries.

This study has several limitations. First, the sample size is relatively limited, the use of purposive sampling may create potential selection bias because only firms with complete CSR, ownership, and financial data are included. Second, although fixed-effects regression is applied, potential endogeneity issues cannot be fully eliminated because liquidity and CSR performance may have a reciprocal relationship.

Future research may extend the sample through cross-country or cross-sector studies to improve generalizability. Future studies may also use alternative measures of liquidity (e.g., current ratio or cash ratio) and CSR performance (e.g., ESG scores or CSR indices), as well as employ advanced methods to address potential endogeneity. In addition, other governance mechanisms, such as board characteristics or institutional ownership, can be explored to provide a broader understanding of the liquidity and CSR relationship.

REFERENCES

- About, A., & Yang, X. (2022). CORPORATE GOVERNANCE AND CORPORATE SOCIAL RESPONSIBILITY: NEW EVIDENCE FROM CHINA. *International Journal of Accounting and Information Management*, 30(2), 211–229. <https://doi.org/10.1108/IJAIM-09-2021-0195>
- Akben-Selcuk, E. (2019). CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE: THE MODERATING ROLE OF OWNERSHIP CONCENTRATION IN TURKEY. *Sustainability*, 11(13), 3643. <https://doi.org/10.3390/su11133643>
- Alhababsah, S. (2019). OWNERSHIP STRUCTURE AND AUDIT QUALITY: AN EMPIRICAL ANALYSIS CONSIDERING OWNERSHIP TYPES IN JORDAN. *Journal of International Accounting, Auditing and Taxation*, 35, 71–84. <https://doi.org/10.1016/j.intaccaudtax.2019.05.006>
- Al Amosh, H., Khatib, S. F. A., & Hussainey, K. (2022). THE FINANCIAL DETERMINANTS OF INTEGRATED REPORTING DISCLOSURE BY JORDANIAN COMPANIES. *Journal of Risk and Financial Management*, 15(9), 375. <https://doi.org/10.3390/jrfm15090375>
- Asni, N., & Agustia, D. (2022). DOES CORPORATE GOVERNANCE INDUCE GREEN INNOVATION? AN EMERGING MARKET EVIDENCE. *Corporate Governance*, 22(7), 1375–1389. <https://doi.org/10.1108/CG-10-2021-0389>
- Aulia, P. R. N., & Setyorini, D. (2021). THE INFLUENCE OF LEVERAGE, MEDIA EXPOSURE, AND LIQUIDITY ON CSR DISCLOSURE (EMPIRICAL STUDY ON ASR AWARD-WINNING COMPANIES IN 2012–2020). *Jurnal*

- Pendidikan Akuntansi & Keuangan, 9(2), 209–221.
<https://doi.org/10.17509/jpak.v9i2.37514>
- Bhimavarapu, V. M., Rastogi, S., & Kanoujiya, J. (2022). OWNERSHIP CONCENTRATION AND ITS INFLUENCE ON TRANSPARENCY AND DISCLOSURES OF BANKS IN INDIA. *Corporate Governance*, 23(1), 18–42.
<https://doi.org/10.1108/CG-05-2021-0169>
- Bing, T., & Li, M. (2019). DOES CSR SIGNAL THE FIRM VALUE? EVIDENCE FROM CHINA. *Sustainability*, 11(15), 4255.
<https://doi.org/10.3390/su11154255>
- Chang, X., Tan, W., Yang, E., & Zhang, W. (2019). STOCK LIQUIDITY AND CORPORATE SOCIAL RESPONSIBILITY. *Finance Research Letters*, 30, 252–257. <https://doi.org/10.1016/j.frl.2018.06.018>
- Crifo, P., Diaye, M.-A., Oueghlissi, R., & Pekovic, S. (2016). WHAT DRIVES FIRMS' CORPORATE SOCIAL RESPONSIBILITY? THE ROLE OF OWNERSHIP CONCENTRATION. In S. O. Idowu & M. Del Baldo (Eds.), *Corporate Responsibility* (pp. 183–204). Palgrave Macmillan.
https://doi.org/10.1057/9781137450722_9
- Crisóstomo, V. L., & Freire, F. de S. (2015). THE INFLUENCE OF OWNERSHIP CONCENTRATION ON FIRM RESOURCE ALLOCATIONS TO EMPLOYEE RELATIONS, EXTERNAL SOCIAL ACTIONS, AND ENVIRONMENTAL ACTIONS. *Revista Brasileira de Gestão de Negócios*, 17(55), 987–1006.
- Fatimah, I. N. (2021). CORPORATE SOCIAL RESPONSIBILITY (CSR) DI INDONESIA. <https://www.aeec.unair.ac.id/corporate-social-responsibility-csr-di-indonesia/>
- Gerged, A. M., Kuzey, C., Uyar, A., & Karaman, A. S. (2023). DOES INVESTMENT STIMULATE OR INHIBIT CSR TRANSPARENCY? THE MODERATING ROLE OF CSR COMMITTEE, BOARD MONITORING AND CEO DUALITY. *Journal of Business Research*, 159, 113762.
<https://doi.org/10.1016/j.jbusres.2023.113762>
- Ghazali, A. M. N. (2007). OWNERSHIP STRUCTURE AND CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE: SOME MALAYSIAN EVIDENCE. *Corporate Governance*, 7(3), 251–266.
<https://doi.org/10.1108/14720700710756535>
- Gunardi, A., Febrian, E., & Herwany, A. (2016). THE IMPLICATION OF FIRM-SPECIFIC CHARACTERISTICS ON DISCLOSURE: THE CASE OF INDONESIA. *International Journal of Monetary Economics and Finance*, 9(4), 379–387. <https://doi.org/10.1504/IJMEF.2016.080080>

- Handoyo, S., & Anas, S. (2024). THE EFFECT OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) ON FIRM PERFORMANCE: THE MODERATING ROLE OF COUNTRY REGULATORY QUALITY AND GOVERNMENT EFFECTIVENESS IN ASEAN. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2371071>
- Haninun, H., Lindrianasari, L., & Denziana, A. (2018). THE EFFECT OF ENVIRONMENTAL PERFORMANCE AND DISCLOSURE ON FINANCIAL PERFORMANCE. *International Journal of Trade and Global Markets*, 11(1), 138–148. <https://doi.org/10.1504/IJTGM.2018.092471>
- Jiang, H., Cheng, Y., Park, K., & Zhu, W. (2022). LINKING CSR COMMUNICATION TO CORPORATE REPUTATION: UNDERSTANDING HYPOCRISY, EMPLOYEES' SOCIAL MEDIA ENGAGEMENT, AND CSR-RELATED WORK ENGAGEMENT. *Sustainability*, 14(4), 2359. <https://doi.org/10.3390/su14042359>
- Khidmat, W. B., Ayub Khan, M., & Ullah, H. (2020). THE EFFECT OF BOARD DIVERSITY ON FIRM PERFORMANCE: EVIDENCE FROM CHINESE LISTED COMPANIES. *Indian Journal of Corporate Governance*, 13(1), 9–33. <https://doi.org/10.1177/0974686220923793>
- Al Lawati, H., & Sanad, Z. (2023). OWNERSHIP CONCENTRATION AND AUDIT ACTIONS. *Administrative Sciences*, 13(9), 206. <https://doi.org/10.3390/admsci13090206>
- Lin, C. C., & Nguyen, T. P. (2022). THE IMPACT OF OWNERSHIP STRUCTURE ON CORPORATE SOCIAL RESPONSIBILITY PERFORMANCE IN VIETNAM. *Sustainability*, 14(19), 12445. <https://doi.org/10.3390/su141912445>
- Lin, Q., & Lin, X. (2021). CASH CONVERSION CYCLE AND AGGREGATE STOCK RETURNS. *Journal of Financial Markets*, 52, 100560. <https://doi.org/10.1016/j.finmar.2020.100560>
- Moratis, L. (2018). SIGNALLING RESPONSIBILITY? APPLYING SIGNALLING THEORY TO THE ISO 26000 STANDARD FOR SOCIAL RESPONSIBILITY. *Sustainability*, 10(11), 4172. <https://doi.org/10.3390/su10114172>