Corporate Social Responsibility in Moderating The Influence of Profitability and Firm Size on Firm Value in The Banking Sector

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ABSTRACT
The value of a firm is crucial for both investors and companies. investors consider that a rise in the firm's value can offer a favorable signal for their investment choices. Based on data from IDX Statistics in recent years, the value of companies in the banking sector, as seen from the PER indicator, shows a downward trend. This situation may occur due to the influence of several factors that impact the decline in the firm's value. This research seeks to elucidate how firm size and profitability influence firm value, using corporate social responsibility (CSR) as a moderating factor. The firm's value is indicated by the price-earnings ratio (PER), profitability is assessed using the return on assets (ROA) ratio, and firm size in this research is evaluated based on the growth of the company's assets. CSR disclosure is one of the company's efforts to legitimize itself and demonstrate its responsibility towards people, communities, and the environment. This study focused on banking sector companies listed on the Indonesia Stock Exchange from 2015 to 2022. A sample of 39 companies was selected through the saturated sampling method. This analysis was performed using dynamic panel data with the System GMM approach. The study's findings indicate that both profitability and firm size positively and significantly impact firm value. Additionally, CSR as a moderating variable strengthen the effect of firm size on firm value. CSR as a moderating variable weakens the relationship between profitability and firm value. Companies, especially bank management, are expected to pay attention to planning CSR strategies that align with their capabilities and implement targeted strategies.

KEYWORDS: Firm Value, Profitability, Firm SIze, Corporate Social Responsibility
DOI: 10.7176/EJBM/16-6-02
Publication date: July 30th 2024

Enhance the welfare of stakeholders by increasing the firm's value is the main goal of the company (Pangestuti, et al., 2022). An increase in the firm's value positively impacts market confidence in the firm's performance, ensuring the continuity of shareholders' interests. The firm's value is an indicator used by investors to assess the company's success in managing its resources (Utami, et al., 2021). A high firm value, measured through market stock value, is influenced by investment opportunities that can drive company growth. The Price Earnings Ratio (PER) is one of the important indicators used by investors to assess the firm's value, indicating the market's expectation value and the price per unit of earnings per share (Tho, et al., 2021).

The phenomenon that has occurred on the Indonesia Stock Exchange over the past eight years is that the average value of companies in the banking sector has experienced fluctuations as presented in Figure 1 below.

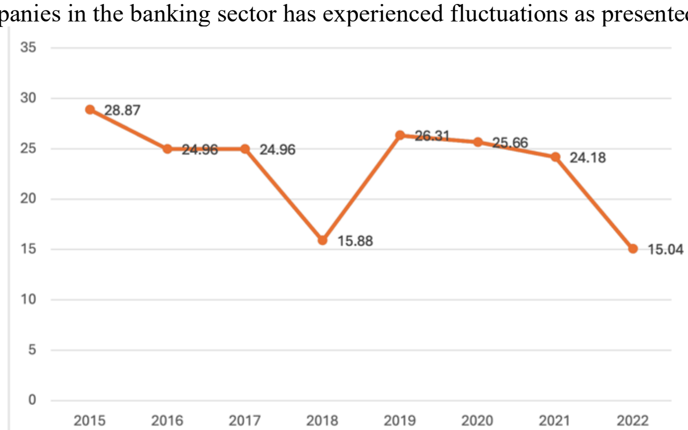

Figure 1 Price Earning Ratio in Banking Sector (Source: IDX Statistic, 2024)

Based on Figure 1, the banking sector has experienced a downward trend in firm value as projected by the Price Earning Ratio (PER). Companies experiencing a decline in value can lower or eliminate the confidence of investors and potential investors in the company, making it difficult to obtain external funding, if this condition continues, it can lead to financial distress (Rahmi et al., 2023). The banking sector attracts investors as a passive investment based on company fundamentals. Therefore, the banking sector must maintain or increase firm value to retain investor's interest. A decline in firm value can reduce investor's interest and reflect investor's pessimism towards the company. The downward trend in PER in the banking sector in Figure 1 indicates the need for analysis of the factors influencing this phenomenon.

Companies use profitability levels, which describe the income or profit generated by the company, as a signal to attract investor interest in investing in the company (Bon & Hartoko, 2022). Signaling theory explains how investors consider the actions taken by company management as signals indicating how management views existing prospects (Brigham & Daves, 2018, p. 619). Based on research by Sudiyatno et al. (2021), profitability is seen as a guarantee of returns on investments made, making profitability one of the main factors considered by investors.

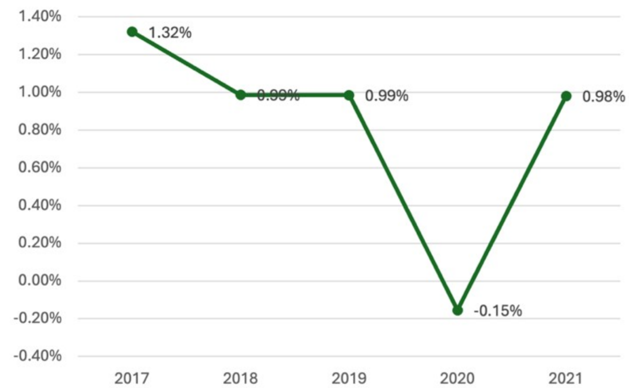

Figure 2 Return on Assets in Banking Sector (Source : Statistic Indonesia, 2024)

According to a report published by the Statistics Indonesia in 2021, Return on Assets (ROA) as one of the profitability indicators showed a downward trend from 2017 to 2020, as shown in Figure 2. A decline in ROA in companies may indicate that the company has not been effective in using its assets to generate profit. A continuous decline in ROA can erode investor confidence regarding the company's ability to maintain or increase profits in the future. This can lead to a decline in the company's stock price, which will affect the firm's value.

Several studies related to the relationship between profitability and firm value have found that profitability has a positive and significant effect on firm value (Intariani & Suryantini, 2020; Meha & Hariadi, 2021; Sudiyatno et al., 2021). However, this condition is not supported by research from Pagaddut (2020), which revealed that profitability does not affect firm value. Studies with differing results indicate the existence of a research gap regarding the relationship between profitability and firm value.

Another factor that has the potential to affect firm value is company size (Bon & Hartoko, 2022). Large-scale companies have sufficient capital to expand their operations, and the market also responds positively because investors' investment security is better assured compared to smaller companies (Sudiyatno et al., 2020). The larger the size of the company, the greater the opportunity for the company to obtain funding, both internally and externally (Murniati, 2016). Firm size can be seen from the growth of the company assessed by asset growth indicators (Sudiyatno et al., 2021). The presence of large companies in terms of size can reflect growth that can attract investor interest, potentially driving up stock prices and increasing firm value (Bon & Hartoko, 2022), Research on the impact of firm size on stock prices has been conducted by Intariani & Suryantini (2020) dan Sudiyatno et al. (2021), who found that firm size has a positive and significant impact on firm value. In contrast to these findings, Digdowiseiso & Cindy (2022)revealed that firm size has a negative and insignificant impact on the value of mining companies listed on the Indonesia Stock Exchange during the period 2016-2020.

The inconsistent findings from research underscore the need for identifying the relationship between profitability, firm size, and firm value. Rahayu & Paramita (2023) found that Corporate Social Responsibility (CSR) can moderate the impact of profitability and firm size on firm value. According to Ahmad et al. (2021), legitimacy theory assumes that investing in corporate social performance can enhance financial performance. In terms of observable impacts, these activities can strengthen investor or prospective investor relations with the company. CSR is hypothesized as a variable that can strengthen the relationship between profitability, firm size, and firm value. CSR disclosure can make investors more interested in investing because CSR activities are expected to enhance firm value. Supporting research by Zaiane & Ellouze (2022) dan Seth & Mahenthiran (2022) indicates that voluntary CSR disclosure is positively related to firm value. Several studies suggesting a positive relationship between CSR and firm value allow CSR variables to strengthen the relationships among other variables.

Profitability can serve as a basis or reference for corporate social responsibility (CSR) disclosure by companies. Research by Khan et al. (2018) states that profitability and firm size are significantly and positively related to corporate responsibility. Larger companies are able to invest more in prudent projects, such as CSR initiatives, to effectively manage relationships with stakeholders and thereby achieve legitimacy and credibility (D'Amato & Falivena, 2020). Grandis & Panggabean (2018) found that firm size significantly influences corporate social responsibility (CSR).

The importance of enhancing firm value is crucial for understanding the current and future conditions of a company, as well as addressing gaps in phenomena and previous research studies such as those by seperti Intariani & Suryantini (2020), Sudiyatno et al. (2021) Meha & Hariadi (2021), Pagaddut (2020), dan Digdowiseiso & Cindy (2022). Therefore, the author aims to investigate the role of Corporate Social Responsibility (CSR) in moderating the influence of profitability and firm size on firm value.

METHODS OF RESEARCH

Based on the issues being studied, this research is an associative study aimed at understanding the relationship between one or more variables. The study focuses on the banking sector listed on the Indonesia Stock Exchange (IDX). It utilizes financial data from companies over an 8-year period, observing from 2015 to 2022. The data sources include variables influencing firm value (Y) in the banking sector, profitability (X_1) and firm size (X_2), with Corporate Social Responsibility (CSR) as a moderator during the period from 2015 to 2022. The sample consists of 39 banking companies listed on the Indonesia Stock Exchange during the specified period. The data analysis technique employed in this research is dynamic panel data regression using the system generalized method of moments (system GMM) approach. The GMM approach is chosen for its ability to handle potential endogeneity issues arising from the bidirectional relationship between dependent and independent (Nguyen & Nguyen, 2021). The dynamic panel data model undergoes specification tests including the Arellano-Bond test and the Sargan test. The Arellano-Bond test is used to detect autocorrelation among residuals in the first differencing model. The Sargan test checks the validity of instrumental variables used, ensuring they do not exceed the number of estimated variables (overidentifying restriction). The decision to reject H_0 is made if the p-value is less than 0.05, indicating significant results. Once the model specification tests are satisfied, subsequent tests for the significance of parameters can be conducted.

RESULTS AND DISCUSSION

At this stage, the dynamic panel data regression model is constructed using the system GMM approach with the assistance of RStudio. Equation (1) describes the dynamic panel data regression model related to Firm Value in the Banking sector from 2015 to 2022.

$$\mathrm{PER}_{it} = \delta \mathrm{PER}_{i,t-1} + \beta_1 \mathrm{ROA}_{it} + \beta_2 \mathrm{AG}_{it} + \beta_3 \mathrm{CSR}_{it} + \beta_4 (\mathrm{ROA} * \mathrm{CSR})_{it} + \beta_5 (\mathrm{AG} * \mathrm{CSR})_{it} + u_{it} \quad (1)$$

$$i = 1,2, \ldots ,39 \text{ dan } t = 2015, 2016, \ldots , 2022$$

with $\mathrm{PER}_{i,t-1}$ representing the firm value indicator, price-earnings ratio, in the previous period, the estimated results are summarized and presented in Table 1.

Table 1. Estimated Result Firm Value Model

Variabel	Without Moderation Variable		With Moderation Variable	
	Koefisien	p_{value}	Koefisien	p_{value}
L.PER	0,223	0,000	0,295	0,000
ROA	558,5	0,009	650,3	0,000
AG	82,60	0,000	50,96	0,008
CSR	0,935	0,023	2,312	0,000
ROA*CSR			- 411,1	0,000
AG*CSR			2,766	0,042
Uji Wald		0,000		0,000
m_1		0,045		0,002
m_2		0,547		0,159
Uji Sargan		0,341		0,249

The coefficients found in Table 1 reflect the estimates from the firm value model without and with the moderation variable for the period 2015 to 2022. These estimates can be represented in equations (2) and (3) as follows:

$$\mathrm{PER}_{it} = 0{,}223_{i,t-1} + 558{,}5\mathrm{ROA}_{it} + 82{,}60\mathrm{AG}_{it} + 0{,}935\mathrm{CSR}_{it} + u_{it} \quad (2)$$

$$PER_{it} = 0{,}295PER_{i,t-1} + 650{,}3ROA_{it} + 50{,}96AG_{it} + 2{,}312CSR_{it} - 411{,}1(ROA * CSR)_{it} + 2{,}766(AG * CSR)_{it} + u_{it} \quad (3)$$

The results presented in Table 1 for both without and with the moderation variable indicate that the m_1 test yielded a $p_{value} < \alpha = 0{,}05$, leading to a rejection of H_0. Based on the m_2 test results, the consistency of GMM in the m_2 model, both without and with the moderation variable, showed$p_{value} > \alpha = 0{,}05$, indicating insufficient evidence to reject H_0. These findings suggest that there is no autocorrelation in either the model without or with the moderation variable. Furthermore, the Sargan test results for both models—without and with the moderation variable showed $p_{value} - 0{,}341 > \alpha - 0{,}05$ dan $p_{value} - 0249 > \alpha - 0{,}05$ respectively. This indicates insufficient evidence to reject H_0. Based on these decisions, it can be concluded that the overidentifying restriction conditions in the model estimations are valid.

In the model analysis presented in Table 1, the significance testing of parameters is conducted in two stages: simultaneous test to determine the overall influence of all independent variables on the dependent variable, and partial test to ascertain the individual influence of each independent variable on the dependent variable. A decision that the test result is significant (rejecting H_0) is made when $p_{value} < 0{,}05$. Simultaneous test (Wlad test) for both the model without the moderation variable and with the moderation variable in Table 1, the Wald test yielded $p_{value} = 0{,}000 < 0{,}05$ this indicates a decision to reject H_0, implying that at least one independent variable in the model significantly influences the dependent variable. The partial test results for both models without and with the moderation variable showed $p_{value} < \alpha = 0{,}05$ Therefore, the decision is made to reject H_0. This decision signifies that each of the lagged dependent variable (PER), ROA, AG, and CSR has a positive and significant influence on firm value. The partial tests confirm that the lagged dependent variable (PER), profitability (ROA), firm size (AG), and Corporate Social Responsibility (CSR) each exert a positive and statistically significant impact on firm value.

Profitability has a coefficient of 558.5, indicating a positive and significant influence on firm value. firm size has a coefficient of 82.60, also indicating a positive and significant influence on firm value. The independent variable profitability, interacting with the moderation variable CSR, has a coefficient of -411.1. This result suggests that CSR can weaken the impact of profitability on firm value. On the other hand, the interaction of the independent variable firm size with the moderation variable CSR has a coefficient of 2.766. This finding indicates that CSR can strengthen the influence of firm size on firm value.

This study demonstrates that the relationship between profitability and firm value can be observed in the context where increasing profitability of a company leads to an increase in its firm value. These findings support signaling theory concerning the link between profitability and firm value. Signaling theory posits that a firm's value continuously signals to investors. High profitability influences investors to view the company as having promising future prospects, thereby attracting investment. Profitability, specifically ROA in this case, shows a positive value indicating that the company effectively manages its assets for various operational activities and generates profit. These research findings are consistent with previous studies by Pangestuti et al. (2022) ; Chakkravarthy et al. (2023); Digdowiseiso Kumba & Cindy Siti Rosyida (2022); Intariani & Suryantini (2020); Rahmi et al. (2023); Saputri & Bahri (2021); Sudiyatno et al. (2021), all of which assert that profitability has a positive and significant impact on firm value.

Based on this research, it is demonstrated that when the size of a company increases, its firm value also increases. In this study, firm size is evaluated using the growth of assets for each banking sector company in Indonesia. Signaling theory supports these findings, suggesting that companies should provide clear and detailed information to external parties or investors, who perceive this information as a positive signal for investment. Strong asset growth signals that a company effectively manages its assets. This capability enhances investor confidence and encourages investment. These research findings align with studies conducted by Harahap et al. (2022); Sari & Wahidahwati (2021); Sudiyatno et al. (2020), which similarly highlight the positive relationship between firm size, measured by asset growth, and firm value.

Corporate social responsibility (CSR), as a form of corporate commitment to social and environmental responsibilities, was found ineffective in moderating the relationship between profitability and firm value. The extent of CSR disclosed varies among companies based on their policies. One factor contributing to CSR's inability to moderate the relationship between profitability and firm value is that companies allocate low funds to CSR initiatives, despite high profitability. Consequently, this allocation may lead to lower firm values. High profitability does not necessarily correlate with high levels of CSR implementation. Waddock et al. (1997) found that companies allocate funds to sustainable actions only when they have extra resources to mitigate risks, aligning with slack resource theory. This study aligns with research by Anjayani & Astika (2023), which similarly concluded that corporate social responsibility weakens the relationship between profitability and firm value.

This study demonstrates that CSR strengthens the relationship between firm size and firm value in the banking sector listed on the Indonesia Stock Exchange (IDX) during the period 2015-2022. Companies experiencing higher growth tend to engage more in CSR activities, influencing their corporate image and leading investors to perceive them as having promising future prospects. This finding aligns with legitimacy theory, which posits that investing in corporate social performance enhances financial performance. Voluntary disclosure of social and environmental information is a phenomenon explored in relation to companies. Legitimacy theory suggests that organizations continually seek ways to ensure their operations align with societal norms and boundaries. Companies that engage in more social activities legitimize themselves as caring about their surroundings beyond profit orientation. These research findings are consistent with studies by Fadhilah et al. (2021) serta Rahayu & Paramita (2023), which found that corporate social responsibility plays a role in strengthening the relationship between firm size and firm value.

CONCLUSION

Based on the analysis and discussion regarding corporate social responsibility moderating the impact of profitability and firm size on firm value, profitability has a positive and significant effect on firm value, indicating that increased profitability influences an increase in firm value. This result reflects successful management of company assets, enhancing firm value efficiently. Firm size also has a positive and significant impact on firm value, meaning that an increase in company size leads to an increase in firm value. These findings demonstrate that management is capable of demonstrating measurable asset growth, which can enhance firm value.

Corporate Social Responsibility (CSR) as a moderator has not been able to strengthen the influence of profitability on firm value. High profitability does not necessarily correlate with high levels of CSR disclosure because companies only allocate funds to sustainable actions when they have extra resources to mitigate risks. However, CSR as a moderator can strengthen the influence of firm size on firm value. This research indicates that management can take action to enhance the company's CSR programs. This action is taken because CSR has been found to strengthen the influence of firm size on firm value.

Companies, especially bank management, are expected to pay attention to factors related to profitability and firm size, which have been found to have a positive and significant relationship with firm value. These factors can send positive signals to both current investors and potential investors. Companies should plan CSR strategies that align with their capabilities and implement targeted strategies effectively. Future research is encouraged to explore other variables that may influence firm value, such as liquidity and dividend policies. Liquidity provides insights into a company's ability to manage assets to meet short-term debt obligations, including dividend payments.

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