The Effect of Profitability on Firm Value with Corporate Social Responsibility Disclosure as a Moderating Variable

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Abstract: The assessment of social responsibility and its impact on the company is challenging mathematically because it is a qualitative study. This study aimed to examine the effect of profitability as measured by ROA and ROE on Tobin's Q firm value and to analyze Corporate Social Responsibility (CSR) in moderating the relationship between profitability and firm value. The findings of this research, which is descriptive quantitative and examines multiple regression models on independent variables (ROA and ROE) as well as the moderating effect of variables (CSR) on firm value (Tobin's Q), have significant implications for the field of corporate governance. The population of this study consists of public companies listed on the Indonesia Stock Exchange (IDX) during 2018-2021, with a total of 619 issuers. The sample was obtained using a purposive sampling technique for as many as 64 companies. The results of this study indicate that ROA does not affect Tobin's Q, while ROE has a positive effect on Tobin's Q. CSR cannot strengthen the influence of ROA on Tobin's Q. On the other hand, CSR weakens the influence of ROE on Tobin's Q.

Keyword: ROA, ROE, Firm Value, Tobin's Q, Corporate Social Responsibility.

1. INTRODUCTION

A publicly listed company is a corporation whose shares or ownership are publicly traded on the capital market. The stock or company value reflects the market's perception of the company's ability to generate sustainable profits, risk management, innovation, and other aspects that contribute to business continuity and growth. The capacity to generate profits is gauged through profitability ratios that assist stakeholders, including investors, management, creditors, and regulators, in making prudent decisions, formulating business strategies, and assessing operational efficiency and risk management. Consequently, a comprehensive grasp of the elements influencing a company's value is vital to ascertain the present condition of the company and its prospective trajectory. Investors and the general public evaluate the company based on the information presented in its published reports. As stakeholders, they can influence market value, necessitating companies to fulfill their social responsibilities. One method of fulfilling corporate social responsibility (CSR) is to publish a sustainability report (SR). Preparing a sustainability report (SR) constitutes a qualitative study conducted by the company in collaboration with relevant stakeholders. Investors evaluate the sustainability of the company's business operations by analyzing this report in conjunction with its financial data. This follows the fundamental principles of corporate social responsibility (CSR), namely the 3P approach (people, planet, profit). Using GRI guidelines in Indonesia is voluntary and not a mandatory requirement imposed by the government. Following POJK Number 51/POJK.03/2017, public companies must incorporate sustainability-related information into annual reports. In the case of public companies, integrating sustainability aspects with annual reports is a common practice, resulting in what is known as an integrated report. A review of publicly listed companies on the Indonesia Stock Exchange (IDX) revealed that only 64 out of 619 listed companies had published sustainability reports as of December 2018. In some reports, there was no cross-index of disclosure items and their sustainability codes. The creation of such an index is essential to ensure the validity of CSR measurement in the study and to align it with the information reported by the company to the public and other related parties.

Previous studies have yielded contradictory results regarding the impact of profitability on firm value, as measured by Tobin's Q. The study's findings conducted by (Ardianto et al., 2017) indicate a positive relationship between ROA and firm value. Moreover (Muslim & Junaidi, 2020) assert in their research that ROE positively affects firm value.

Both studies concur that an increase in profitability results in greater responsiveness from investors, which in turn leads to an increase in the value of the company. However, research by Anggraini & Widhiastuti (2020) indicates that ROA has no effect on firm value. Similarly, (Prasetyo et al., 2020) propose that ROE has no impact on firm value. These disparate findings underscore the imperative need for a deeper understanding of the factors influencing firm value. Prior research on the moderating effect of corporate social responsibility (CSR) on profitability has yielded inconsistent results. Savitri (2017) found that CSR can reinforce the impact of ROA on firm value, yet it is unable to enhance the influence of ROE on firm value. This contrasts with the findings of Itsnaini & Subardjo (2017). The research conducted by Saridewi (2018) indicates that CSR can reinforce the relationship between ROE and firm value. Conversely, the research conducted by Itsnaini & Subardjo (2017) suggests that CSR is unable to enhance the impact of ROA on firm value. The existing research on corporate social responsibility (CSR) disclosure highlights a need for novel approaches to stimulate further investigation. The forthcoming GRI standardization updates are anticipated to motivate more companies to publish sustainability reports. This study employs CSR moderation variables that either reinforce or attenuate the influence of return on assets (ROA) and return on equity (ROE) on firm value. In contrast to previous studies, this study utilizes the GRI standard as a reference for CSR assessment, replacing the Guidelines version, which is no longer valid.

1) In light of the aforementioned description, the issues inherent to this study can be distilled into the following questions: Does ROA exert a notable and positive influence on firm value?
2) Does ROE have a discernible and positive impact on firm value?
3) Does CSR serve to reinforce the relationship between ROA and firm value?
4) Does CSR have a noticeable and reinforcing effect on the relationship between ROE and firm value?

2. LITERATURE REVIEW

The signaling theory

The concept of signaling theory was introduced by Spence (1973) in his research entitled Job Market Signaling. By this theory, information can serve as a signal whereby the entity possessing said information (the sender) endeavors to convey pertinent details to the recipient. The recipient then modifies its conduct following its interpretation of the signal. As defined by Brigham & Houston (2018), signal theory refers to the actions undertaken by company management to provide information or instructions to investors regarding the company's performance and future prospects. Rachman & Priyadi (2022) posit that within the corporate realm, internal parties (management) endeavor to disseminate favorable signals to external parties, particularly investors. It can be inferred that within the framework of signal theory, information is orchestrated in a manner that enables internal stakeholders (managers) to transmit positive or negative signals to stakeholders (shareholders/investors). The objective is to elicit the desired response that will facilitate attaining organizational goals.

Stakeholder theory

Freeman first introduced the stakeholder theory (in Suharyani et al., 2019) to assess the relationship between companies and the various groups that exist beyond the realm of shareholders. These stakeholders, as defined by the theory, are individuals or entities that can be affected by or affect a company's actions. The term "stakeholder" is used to describe any individual or entity with an interest in a company that can potentially influence or be influenced by the company's actions. (dalam Chumaidah, 2018) asserts that stakeholder theory represents a company's dedication to promoting sustainable economic growth through a concentration on corporate social responsibility and pursuit of equilibrium between considerations of economic, social, and environmental factors, in addition to attention to suppliers, customers, governments, communities, investors, employees, political associations, and trade. This is because these stakeholders possess rights to the actions undertaken by company management.

Legitimacy theory

Legitimacy theory posits a social contract between a company and society. Ghozali and Chariri (in Chumaidah, 2018) posit that legitimacy theory is founded upon the concept of a "social contract" between a company and the community in which it operates and utilizes economic resources. In order for institutions to achieve goals in line with the wider community, legitimacy theory is a necessary concept. In conclusion, legitimacy theory can be defined as the concept of a "social contract" between companies and society. Companies fulfill their social obligations, such as publishing reports on their activities, while society supports these activities. When companies meet the expectations of society, they can ensure the legitimacy of their activities and the sustainability of their corporate life. This allows them to attract external investors, which ultimately increases the value of the company.

Profitability

The term "profitability" refers to the ability of a company to generate profits. The profitability ratio is a financial ratio that describes the effect of a combination of liquidity, asset management, and debt on operating results (Brigham & Houston, 2018). A company with a good level of profitability allows stakeholders, including creditors, suppliers, and investors, to ascertain the extent to which the company generates profits. This is a factor that increases the value of the company (Itsnaini & Subardjo, 2017).

Return On Assets (ROA)

The return on assets (ROA) is the ratio of net income to total assets. This ratio quantifies the earnings generated after accounting for interest and taxes on total assets. The ROA demonstrates the efficacy of managerial decision-making concerning the utilization of the company's assets for generating profits. Other names for ROA include the Economic Rentability ratio (RE ratio), Asset Return Rate, Asset Income Ratio, and Asset Profitability (Wahyuningsih & Widowati, 2016)..An elevated ROA indicates a greater return, which, in turn, has a beneficial impact on the company's value. Following Appendix 1 of OJK Circular Letter Number /SEOJK.03/2019, the evaluation criteria for ROA in public companies are classified into several categories, as outlined as follows: The first rank is assigned to those companies with a ROA exceeding 1,450%. The second rank is defined by a ROA value between 1.215% and 1.450%. A ROA of 0.999% defines the third rank to 1.215%. The fourth rank is associated with a ROA of 0.765% or less, inclusive of the range of 0.999%. The fifth rank comprises those with a ROA of 0.765% or less.

Return On Equity (ROE)

Return On Equity (ROE) is defined as the ratio of income generated on invested capital. roe serves as an indicator of the efficacy of managerial efforts in optimizing returns on shareholder investments. the roe is calculated by dividing the net income attributable to common shareholders by the common equity, thereby measuring the return on shareholder investment. roe is the most comprehensive indicator of profitability for investors. A high ROE indicates that the company's top management has been successful in achieving the mission of the company owner, namely profit per rupiah of invested capital (Wahyuningsih & Widowati, 2016). An elevated ROE corresponds with a greater return, which, in turn, has a beneficial effect on the company's value. In accordance with appendix 1 of OJK circular letter number/SEOJK.03/2019, the ROE assessment criteria for public companies are classified into several categories, as outlined below:

The ranking system is as follows: RANK 1: ROE > 23%, Rank 2: 18% < ROE ≤ 23%, Rank 3: 13% < ROA ≤ 18%, Rank 4: 8% < ROA ≤ 13%, Rank 5: ROA ≤ 8%

Firm Value

The company's value is defined as the present value of the future cash flows that the company is expected to generate. In this study, the firm value is calculated using Tobin's Q ratio, which was introduced by Prof. James Tobin in 1969.

This ratio is calculated by dividing the market value of a company (market value of shares and liabilities) by the replacement value of its assets (replacement cost). The Tobin Q ratio is a widely utilized measure in academic research due to its integration of fundamental financial elements and replacement cost, which enhances the relevance of the firm value assessment (Pratiwi et al., 2017). Calculating Tobin's Q requires the application of lengthy and complex processes to determine the replacement cost value. This resulted in the development of subsequent studies that sought to simplify the fundamental Tobin's Q equation. The version of Tobin's Q developed by Lindenberg & Ross (1981) introduced a simplified market value of debt formula and replaced the replacement value of assets with the book value of assets. This version is frequently employed in diverse research simulations due to its consistent accuracy and proximity to the original Tobin's Q formula. These findings are also corroborated by Black et al. (2003), whose research employs the book value of total assets as a means of approximating replacement cost. The findings indicate that the discrepancy between the replacement value and the book value of total assets is not substantial, thereby suggesting that the two variables can be effectively substituted for one another (Pratiwi et al., 2017). The measurement of firm value employs the formula developed by Lindenberg & Ross (1981). However, the use of the book value of debt instead of the market value of debt, as observed in the research conducted by Rajagukguk et al. (2019), enables a more conservative analysis. This is due to the fact that the research sample comprises public companies from diverse sectors, which exhibit varying credit risk and debt market value characteristics.

Corporate Social Responsibilities (CSR)

According to the World Business Council for Sustainable Development (WBCSD), corporate social responsibility (CSR) is a business's commitment to sustainable economic growth by working with employees, their representatives, their families, their communities, and society. The goal is to improve the quality of life in a way that benefits both business and development. The assessment of CSR can be seen in the Sustainability Report (SR) or Sustainability Report published by the company. One organization that actively publishes guidelines or standards related to the sustainability reporting framework is the Global Reporting Initiative (GRI). GRI standards are dedicated to disclosure reporting that focuses on material issues. Reporting to these standards can provide a comprehensive picture of the company's material issues, related impacts, and how those impacts are managed. Any company can use some or all of the GRI Sustainability Reporting Standards. The GRI Standard includes 3 universal standard modules: GRI 101 Foundation, GRI 102 General Disclosure, GRI 103 Management Approach, and other specialized modules: GRI 200 Economy, GRI 300 Environment, and GRI 400 Social. The CSR variable is measured by observing the number of information items disclosed in the sustainability report divided by the total number of disclosure items. If the information item is not present, it is assigned a score of 0. If the information item is present, it is assigned a score on a scale of 1 to 5, depending on the completeness of the disclosure. Based on this calculation, the evaluation results become $0 \leq CSR \geq 1$, so the closer to 1, the better because it shows the seriousness of the company in fulfilling its social responsibility.

Hypothesis formulation

The Effect of ROA on Company Value

Return On Asset (ROA) is a ratio that compares net income (after interest and taxes) to total assets. Company management and investors want their assets to be productive to have a high ROA because the higher the ROA value, the more effective the company is in managing its assets. This is in accordance with signal theory, where companies that have high ROA make investors respond positively (Wahyuningsih & Widowati, 2016). Some previous studies provide results in accordance with signal theory, where the higher the ROA, the better the feedback given by investors is to increase the company's value. The previous research was conducted by (Rozaq, 2020), (Dwiast et al., 2019), (Lestari & Rahmayanti, 2017), and Ardianto et al. (2017). In contrast to research conducted by Rahmantio et al. (2018), Anggraini & Widhiastuti (2020), and (Robiyanto et al., 2020), which showed that the ROA results had an insignificant effect on firm value. Based on the theory used and the description of previous research, the hypothesis that can be formulated is as follows:

H1: ROA has a significant and positive effect on firm value.

The Effect of ROE on Firm Value

Return On Equity (ROE) is a ratio that measures the ratio of net income (after interest and taxes) to total equity. ROE indicates the success or failure of management in maximizing returns on shareholder investment. This is in line with signal theory, where the higher the roe, the higher the success of company management in fulfilling the owner's mission, namely profit per rupiah of capital invested in the company (Wahyuningsih & Widowati, 2016). Several previous studies agree that roe has a significant effect on firm value, as conducted by Rahmantio et al. (2018), (Mega Wahyu Vebriany, 2015), (Muslim & Junaidi, 2020), (Salma & Sulasmiyati, 2021). In contrast to research conducted by Nafisah et al. (2018), Dama & Tulung (2017), Robiyanto et al. (2020), dan Silalahi (2016) where ROE has an insignificant effect on firm value. Previous research still has inconsistent results, so new data analysis is needed. Based on the theory used and the description of previous research, the hypothesis that can be formulated is as follows:
H2: ROE has a significant and positive effect on firm value.

CSR strengthens the effect of ROE on Firm Value

Corporate Social Responsibility (CSR) is a concept in which a company is committed to continuing to behave ethically and fulfill its responsibilities in its business activities, as well as paying attention to the balance between stakeholders in the company (Wahyuningsih & Widowati, 2016). Referring to signal theory and stakeholder theory, stakeholders will evaluate how well the company's financial performance and social responsibility. The company legitimizes its activities to manage assets effectively and responsibly by publishing sustainability and financial reports. previous research on social responsibility that significantly moderates the effect of ROA on firm value can be seen in research conducted by (Lestari & Rahmayanti, 2017), (Chumaidah & Priyadi, 2018), and (Savitri, 2017). Some studies conclude that CSR does not significantly moderate the effect of ROA on firm value, which can be seen in the research (Rozaq, 2020), (Itsnaini & Subardjo, 2017), (Rachman & Priyadi, 2022), and (Harningsih et al., 2019). Based on the theory used and the description of previous research, the hypothesis that can be formulated is as follows:
H3: CSR has a strengthening effect on the relationship between ROA and firm value.

CSR strengthens the effect of ROE on Firm Value

Based on signal and stakeholder theory, it is important for management to disclose CSR information to provide positive signals to stakeholders regarding future economic benefits because investors will choose to invest in companies that provide the information they need. Companies publish sustainability reports and financial reports as a form of legitimization and commitment to managing investor capital. Previous research supports that CSR significantly moderates the effect of ROE on firm value, as conducted by (Saridewi, 2018). As for research done by (Savitri, 2017), and (Karimah & Arifin, 2019) where CSR does not significantly moderate the effect of ROE on firm value. Based on the theory used and the description of previous research, the hypothesis that can be formulated is as follows:
H4: CSR has a strengthening effect on the relationship between ROE and firm value.

3. METHOD

Population and Sample

The population in this study are all publicly listed companies listed on the Indonesia Stock Exchange (IDX) for 2018-2021. The total number of public companies as of December 2018 is 619 issuers. The selection of the time period was with the consideration that the 2016 GRI Standard was officially enforced in 2018. The sampling method used in this study is non-probability sampling, which uses a purposive sampling method to obtain a representative sample following the specified criteria. This research sample has the following criteria: 1) Public companies from all sectors listed on the Indonesia Stock Exchange (IDX) during 2018-2021; 2) Public companies that publish both separate and integrated sustainability reports during the 2018-2021 period; 3) Public companies that publish annual reports consecutively in the 2018-2021 period. The number of selected samples that meet the criteria is 64 companies from all sectors except technology because it has just become one of the sectors on the IDX on August 5, 2019.

Data and Data Collection Methods

The type of data used in this study is secondary data originating from third parties. This data has undergone a professional audit process according to government policy and is officially published to be processed immediately and considered valid and reliable. The data source is downloaded from the official company website, which is the sample. The data collection technique is a document study that observes and records the company's annual and sustainability reports. This research data is recorded as panel data (balanced), a combination of time series and cross-section data with the same number of observations for all groups.

Multiple linear regression analysis

Linear regression analysis in studies with moderator variables is called moderated regression analysis (MRA). This analysis uses a regression equation that includes an element of interaction, which is the multiplication of two or more independent variables (Ghozali, 2016). This research implements panel data regression because the data used are panel data by choosing the common effect model, fixed effect, or random effect model (REM). The regression equation is as follows:

$$Y = c + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_1 {*} M + \beta_4 X_2 {*} M + e$$

Where:

Y = Company value (Tobin's Q)	= (Market Value of Stock + Debt)/TA
c = Constant	
β1 - β4 = Regression coefficient	
X1 = Independent variable (ROA)	= EAT/Total Assets
X2 = Independent variable (ROE)	= EAT/Total Equity
M = Moderator variable (CSR)	= Corporate Sustainability Index Disclosure $\text{firm}_i = \frac{\sum Xi}{n_i}$
X1*M = Interaction between ROA with CSR moderator	$\sum Xi$ = Number of GRI standard items disclosed
X2*M = Interaction between ROE with CSR moderator	
e = error term	

4. RESULT AND DISCUSSION

Descriptive statistics

Variable Y (Tobin's Q as Company Value)

Variable Y is the company value proxied by Tobin's Q; from the statistical data, it can be seen that the maximum value is 17.72 owned by Unilever Indonesia Tbk. in 2018, while the minimum value is 0.47 belonging to the Herbal and Pharmaceutical Industry Sido Tbk. in 2018. Variable Y has a median value of 1.02 and an average of 1.51. It can be concluded that the market highly values the average company. The standard deviation of 2.08 indicates that the data tends to be more widely spread and diverse than the average value. This can happen because the data sample comes from various industrial sectors.

Variable X1 (ROA)

Variable X1 is ROA; from the statistical data, it can be seen that the maximum value is 0.92, owned by Merck Tbk. in 2018, while the minimum value (-0.58) belongs to Garuda Indonesia (Persero) Tbk in 2021. The X1 variable has a median value of 0.03 and an average value of 0.04. It can be concluded that, on average, the company is included in the first rank of good ROA criteria according to OJK. The standard deviation of 0.11 indicates that the data tends to be more widely spread and diverse than the average value. This can happen because the data sample comes from various industrial sectors.

Table 1. Descriptive Statistics

Statistic	Y (Tobin's Q)	X1 (ROA)	X2 (ROE)	M (CSR)
Mean	1.513419	0.039899	0.131115	0.543707
Median	1.023513	0.025651	0.087909	0.525078
Maximum	17.71587	0.920997	5.445534	0.935294
Minimum	0.474422	-0.580308	-2.543396	0.336306
Std. Dev.	2.082184	0.112998	0.469555	0.103785
Observasion	256	256	256	256

Variable X2 (ROE)

Variable X2 is ROE; from the statistical data, it can be seen that the maximum value is 5.45, owned by Waskita Beton Precast Tbk. in 2020, while the minimum value (-2.54) belongs to Bumi Resources Tbk. in 2020. The X2 variable has a median value of 0.09 and an average value of 0.13. It can be concluded that, on average, the company is included in the third rank of good ROE criteria according to OJK. The standard deviation of 0.47 indicates that the data tends to be more widely spread and diverse than the average value. This can occur because the data sample comes from various industrial sectors.

Variable M (CSR)

Variable M is CSR as a moderator variable; from the statistical data, it can be seen that the maximum value is 0.94 owned by ABM Investama Tbk. in 2021, while the minimum value is 0.34 owned by Bank OCBC NISP Tbk. in 2018. The X2 variable has a median value of 0.53 and an average value of 0.54. It can be concluded that on average the company only discloses about 54% of the applicable GRI standards. The standard deviation of 0.10 indicates that the data is homogeneous and gathers closer to its mean value. This happens because the observation data is calculated using the same GRI standard indicator.

Variable X1 (ROA)

Variable X1 is ROA; from the statistical data, it can be seen that the maximum value is 0.92, owned by Merck Tbk. in 2018, while the minimum value (-0.58) belongs to Garuda Indonesia (Persero) Tbk in 2021. The X1 variable has a median value of 0.03 and an average value of 0.04. It can be concluded that, on average, the company is included in the first rank of good ROA criteria according to OJK. The standard deviation of 0.11 indicates that the data tends to be more widely spread and diverse than the average value. This can happen because the data sample comes from various industrial sectors.

Linear Regression Test

Chow Test

The calculated Prob. Chi-square value is 0.0000. This indicates that the probability value is less than the standard significance level ($0.0000 < 0.05$). Upon examination of the criteria for hypothesis determination, it can be concluded that the null hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted. The results of the analysis indicate that the panel data multiple regression model selected for the Chow test is the fixed effect model (FEM).

Hausman Test

The probability Chi-square value is 0.0000, as indicated by the calculation results. This indicates that the probability value is less than the standard significance level ($0.0000 < 0.05$). Upon examination of the criteria for hypothesis determination, it can be concluded that the null hypothesis (Ho) is accepted, and the alternative hypothesis (Ha) is rejected. The results of the analysis of the suitability of the panel data multiple regression model in the selected Hausman test are the fixed effect model (FEM).

In this study, the Chow and Hausman tests yielded identical results, namely the fixed effect model. Consequently, the LM (Lagrange Multiplier) test was deemed unnecessary. Ultimately, it can be posited that the optimal model for investigating the influence of ROA and ROE on firm value (Tobin's Q) with CSR as a moderating variable is the fixed effect model (FEM).

Classical Assumption Test

This study employs the fixed effect model (FEM), which is an ordinary least squares (OLS) approach. Consequently, only two classical assumption tests were conducted: the multicollinearity test and the heteroscedasticity test. The results of the assumption tests are presented below:

Heteroscedasticity Test

The objective of the heteroscedasticity test is to ascertain whether there is an inequality of variance in the residuals of observations in a regression model. The results of the heteroscedasticity test were processed using the Eviews program. The probability of the variables X1, X2, and M having a value greater than the real level $\alpha = 0.05$ was calculated, indicating that these variables are homoscedastic or exhibit no symptoms of heteroscedasticity.

Multicollinearity Test

As this study employs more than one independent variable, it is essential to assess the presence of multicollinearity. The cutoff value employed is Tolerance ≥ 0.10, equivalent to VIF ≤ 10 (since VIF = 1/Tolerance). A tolerance value of 0.10 or greater indicates that the level of collinearity must be less than 0.90. The results of the multicollinearity test indicate that the variables X1, X2, and M exhibit a low correlation value and a collinearity level of ≤ 0.90, thereby demonstrating the absence of multicollinearity. Similarly, the Variance Inflation Factors (VIF) test in Table 4.6 indicates that the variables X1, X2, and M have a VIF value of less than 10, confirming the absence of multicollinearity.

Multiple linear regression analysis

Multiple linear regression models are used to test the effect of ROA and ROE variables on Tobin's Q with moderation of CSR variables. Multiple regression models are calculated using Eviews 13, and the estimation results are as follows:

Table 2. Multiple Regression Results - Partial (FEM)

Dependent Variable: Y				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	1.393762	0.053059	26.26840	0.0000
X_1	1.006378	3.632654	0.277037	0.7821
X_2	3.972865	1.165683	3.408187	0.0008
X_1*M	2.559404	6.836779	0.374358	0.7086
X_2*M	-7.087596	2.211111	-3.205446	0.0016
F-statistic	33.78261			0.0000
Adjusted R-squared	0.895979			

The t-test shows the effect of the relationship between the independent variable and the dependent variable partially. Based on Table 2 above, the effect of the independent variable on the dependent variable is as follows:

The t-test value of the ROA variable (X1) is 0.277037 is smaller than the t-table of 1.969. The result indicates no significant and positive effect of the ROA variable (X1) on Tobin's Q company value (Y). The results of the t-test on the ROE variable (X2) with the obtained t-statistic value of 3.408187 is greater than the t-table of 1.969. This shows that the ROE positively impacts company value. The t-test results on the interaction variable (X1*M) is 0.374358, smaller than the t-table value of 1.969. These results indicate that there is no significant and reinforcing effect of CSR variable (M) on the relationship between ROA (X1) and Tobin's Q (Y) company value. The t-test results on the interaction variable (X1*M) obtained a t-statistic value of -3.205446, smaller than the t-table of 1.969. This indicates that the Ho hypothesis is accepted at the 5% real level. These results indicate that there is no significant and reinforcing effect of the CSR variable (M) on the relationship between ROE (X2) and Tobin's Q (Y) company value.

Discussion

The influence of ROA on company value.

The results of the t-test on profitability (ROA) and firm value (Tobin's Q) indicate that the t-statistic value of 0.277037 is less than the t-table value of 1.969, thereby providing evidence that the null hypothesis is accepted. This indicates that the null hypothesis is accepted at the 5% significance level. Therefore, the Ha hypothesis is rejected, as there is no significant and positive effect of the ROA variable on Tobin's Q firm value. The results of this study contradict signal theory, which states that ROA disclosure is a company's effort to provide positive signals to investors. There are several reasons that cause ROA to have no effect on firm value, including the possibility that investors in the observation period do not consider asset aspects as a consideration for their investment decisions.
The results of the analysis align with those of previous research conducted by, (Anggraini & Widhiastuti, 2020), (Rahmantio et al., 2018), and (Robiyanto et al., 2020) concluded that ROA has no effect on firm value because it is not a factor investors consider when making investment decisions during the observation period. In contrast to these findings, several studies have demonstrated that ROA positively impacts firm value. For instance, (Rozaq, 2020), (Dwiastuti & Dillak, 2019), (Lestari & Rahmayanti, 2017), (Ardianto et al., 2017) and (Nafisah et al., 2018). The studies by (Mumtazah & Purwanto, 2020), (Dama & Tulung, 2017), (Chumaidah & Priyadi, 2018) (Silalahi, 2016) and (Savitri, 2017) also reached this conclusion.

The effect of return on equity (ROE) on company value.

The t-test results on profitability (ROE) and firm value (Tobin's Q) indicate that the t-statistic value of 3.408187 is greater than the t-table value of 1.969, thereby proving that the null hypothesis is rejected. This indicates that the null hypothesis is rejected at the 5% significance level. Therefore, the alternative hypothesis is accepted, indicating the ROE variable's significant and positive effect on Tobin's Q company value. The findings of this study align with the tenets of signal theory, which posits that the disclosure of ROE by a company is an attempt to disseminate positive signals to investors. A high ROE indicates that the company has healthy finances, particularly regarding capital management. This signal is responded to positively by investors interested in investing their capital to increase stock demand. Furthermore, high stock demand will impact the company's share price increase. The level of ROE is positively related to the stock price, which determines the company's value. The significant positive effect of ROE on firm value (Tobin's Q) is consistent with the findings of previous research conducted by (Rahmantio et al., 2018), (Mega Wahyu Vebriany, 2015), (Salma & Sulasmiyati, 2021). In contrast with the findings of (Nafisah et al., 2018), (Dama & Tulung, 2017), (Robiyanto et al., 2020), (Silalahi, 2016), and (Prasetyo et al., 2020), who concluded that ROE has no effect on firm value.

The strengthening effect of CSR on the relationship of ROA to firm value

Based on the results of the t-test on the interaction variable (X1*M), which symbolizes the moderation of CSR on the relationship between ROA and firm value (Tobin's Q), the t-statistic value of 0.374358 is smaller than the t table of 1.969. This shows that the Ho hypothesis is accepted at the real level of 5%. It can be concluded that the Ha hypothesis is rejected because there is no significant and reinforcing effect of CSR variables on the relationship between ROA and Tobin's Q firm value. The results indicate that, statistically, CSR in sustainability reports cannot strengthen the effect of ROA on firm value. This is not in accordance with signaling theory, where CSR disclosures in sustainability reports that show the company's alignment with stakeholder interests do not get the desired reciprocity. The company's communication with stakeholders, especially capital market investors, should be a positive signal to strengthen the company's value. This can be caused by other factors outside research that influence investors' decisions.

This study supports studies conducted by (Rozaq, 2020), (Itsnaini & Subardjo, 2017), (Rachman & Priyadi, 2022), (Harningsih et al., 2019), (Khasanah & Istikhoroh, 2019), and (Putri, 2017) who concluded that CSR is unable to moderate the effect of ROA on firm value. In contrast to the research results of (Lestari & Rahmayanti, 2017), (Chumaidah & Priyadi, 2018), and (Savitri, 2017) which reveals that CSR moderates the effect of ROA on firm value.

The effect of CSR on the relationship of ROE to firm value

Based on the results of the t-test on the interaction variable (X2*M), which symbolizes the moderation of CSR on the relationship between ROE and firm value (Tobin's Q), the t-statistic value of -3.205446 is smaller than the t table of 1.969. This shows that the Ho hypothesis is accepted at the real level of 5%. It can be seen that the t-statistic (X2*M) is negative while the probability value of 0.0016 is smaller than the real level α 0.05. It can be concluded that CSR variables have a significant and weakening effect on the relationship between ROA and Tobin's Q firm value. The results show that CSR in sustainability reports statistically weakens ROE's effect on Tobin's Q firm value. This is still in accordance with the signal theory put forward by (Chumaidah & Priyadi, 2018), which states that CSR disclosure in sustainability reports can contain positive or negative signals depending on the company's condition. In other words, a sustainability report that contains negative CSR information indicates that the company's condition is not good. The company's poor condition will reduce investors' assessment of the company's ROE, reducing the company's value. Since CSR content contains economic information, including the company's financial health, sustainability reports can be influenced by company performance and external environmental influences such as economic recession. CSR results that weaken the influence of ROE on firm value are supported by research conducted by (Febriana, 2013). This is different from the research by (Saridewi, 2018), which concluded that CSR strengthens the influence of ROE on firm value. As for research that suggests that CSR cannot moderate the relationship between ROE and firm value at all, as conducted by (Savitri, 2017) and (Karimah & Arifin, 2019). The regulation of environmental aspects based on Financial Services Authority Regulation Number 51/POJK.03/2017 at least, includes 1) energy use (including electricity and water); 2) reduction of emissions produced (for Financial Institutions, Issuers, and Public Companies whose business processes are directly related to the environment); 3) reduction of waste and effluent (waste that has already entered the environment) generated (for Financial Services Institutions, Issuers and Public Companies whose business processes are directly related to the Environment); or Environment); or 4) preservation of biodiversity (for

Financial Services Institutions, Financial Institutions, Issuers and Public Companies whose business processes are directly related to the Environment); or Environment) (Peraturan Otoritas Jasa Keuangan, 2017). For example, BRI actively manages greenhouse gas emissions and endeavors to address climate change as part of responsible and environmentally conscious business practices. BRI is developing green banking products and services following regulations in response to the market demand for green finance (BRI, 2023). PERTAMINA 's aspiration to implement green and sustainable energy is translated into energy transition pillars, namely improving PERTAMINA's refineries to generate eco-friendly fuel, further developing bioenergy into biomass and bioethanol, optimizing potentials, as well as increasing installed geothermal capacity and hydrogen commercialization (Pertamina, 2023). In ESG management, in 2023, PERTAMINA implemented a series of emission reduction programs from operational activities and successfully recorded 1,135 million tons of CO2e reduction in emissions. With this achievement, overall, from 2010 until the end of 2023, PERTAMINA has contributed to reducing carbon emissions by 8.5 million tons of CO2e from the 2010 emission baseline. The sale of B35 biodiesel reduced emissions by 28 million tons of CO2e annually. PERTAMINA also develops methane gas (CH4) emissions management and decarbonization efforts, contributing to a reduction in methane gas (CH4).

5. CONCLUSION

In conclusion, the results of the analysis indicate that there is a significant positive relationship between profitability and firm value. The findings suggest that firms with higher profitability levels tend to have higher firm values. The analysis of the effect of profitability (ROA and ROE) on firm value (Tobin's Q) with Corporate Social Responsibility (CSR) as a moderating variable, carried out in public companies listed on the Indonesia Stock Exchange (IDX) in 2018-2021, yielded the following results: 1) The ROA variable does not exert a significant and positive effect on Tobin's Q company value, thereby accepting the Ho hypothesis; 2) The ROE variable exerts a significant and positive influence on Tobin's Q company value, thereby rejecting the Ho hypothesis; 3) Corporate Social Responsibility is categorized as a potential moderating variable (homogenizer moderating) based on MRA analysis. The results indicate no significant and reinforcing effect of CSR variables on the relationship between ROA and Tobin's Q firm value. Consequently, the Ho hypothesis is accepted. Similarly, the analysis shows no significant and reinforcing effect of CSR variables on the relationship of ROE to Tobin's Q firm value. The company must comply with the provisions of the Financial Services Authority Regulation Number 51/POJK.03/2017 on implementing sustainable finance for financial services institutions, issuers, and public companies institutions (Peraturan Otoritas Jasa Keuangan, 2017). Most companies, such as BRI and PERTAMINA, comply with this provision described in the discussion session. In light of the aforementioned analysis, discussion, and conclusions, the following recommendations can be put forth:

1) Future research may wish to consider alternative proxies for firm value, such as PBV (price to book value), as the dependent variable
2) Future research is expected to take a sample of companies from one particular sector in order to ensure more accurate representation of the results.

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