

THE ROLE OF PERFORMANCE ON THE RELATIONSHIP FACTORS AFFECTING FIRM VALUE

Riezka Laila Nabila¹, Muhamad Safiq^{2*}

^{1,2}Faculty of Business, President University

*Email: muhamad.safiq@president.ac.id

Abstract

This research aims to examine the effect of green accounting, Corporate Social Responsibility, institutional ownership, board size on firm value with the moderating role of company performance proxied by profitability. This research is quantitative research. Data collection was carried out using secondary data obtained through annual reports listed on the Indonesia Stock Exchange. This study used 46 manufacturing companies from the period 2017-2021. Sampling was carried out using purposive sampling method. The results of this study found that green accounting, institutional ownership, board size have no significant effect on firm value. However, only Corporate Social Responsibility has a significant effect on firm value. Furthermore, performance strengthens the relationship between green accounting and firm value. Performance strengthens the relationship between CSR and firm value. Meanwhile, performance weakens the relationship between institutional ownership and firm value. Performance weakens the relationship between board size and firm value.

Keywords: Green Accounting, Social Responsibility, Institutional Ownership, Board Size, Firm Value, Firm Performance

JEL: M14, O16

Introduction

Nowadays, developments in the industrialized world can support national development, especially in economic growth. However, a company is considered to contribute to significant environmental damage. Environmental impacts include water pollution, hazardous waste, exploitation of nature, and global warming. In Law No. 32/2009 on environmental conservation and management, the government has tried to protect the environment (Vanya, 2021). In addition, technological developments and the increasing human population have made the industry grow. Companies are expected to care about issues that affect people and the environment in addition to profits. Thus, in line with the idea of the "triple bottom line (profit, people, and planet)" (Fauzi et al., 2010).

In addition, companies have the right to use the natural and human resources around them and are responsible for all the consequences of their operations. However, not all companies are willing to incur environmental costs because it will automatically reduce the profits earned and impact the company's financial performance (Latief, 2016). Therefore, the nature of the service sector's contribution to the operations of businesses and sectors that need to be more easily analyzed will determine whether or not the green economy develops successfully (Jones et al., 2016).

One solution to the problem of economic actors carrying out activities that impact the environment is green accounting. According to Ethika et al., (2019), green accounting affects firm value. Hence, implementing green accounting is a move to boost a company's economy without ignoring the company's environmental conditions (Chasbiandani et al., 2019). Therefore, companies that are concerned about environmental management can boost production impactiveness and enhance the company's reputation to positively impact firm value.

Company value is one of the most significant markers of firm investment (Trafalgar & Africa, 2019). Company competition in the era of globalization impacts every to improve performance to compete with other firms. Therefore, the impact of global economic conditions in the country causes all stocks to decline in price, and there is no consistent stock movement. The condition of the manufacturing industry is growing slowly due to the global economic situation, so the export of the manufacturing industry is also depressed (Yullyanna, 2020). Thus, factors affecting company value,

including green accounting through environmental costs, CSR disclosure, and corporate governance, are also factors in increasing firm value.

Environmental accounting, finance, environmental cost, environmental management, and natural resource accounting strongly relate to firm value (Pantamee, 2019). Hence, the emergence of green accounting in companies to comply with regulations regarding environmental sustainability has been established. However, in making optimal environmental performance, companies must incur costs related to efforts from environmental impacts. The environmental costs reported in the financial statements can make excellent and correct decision-making related to environmental preservation in the future. Therefore, the implication of green accounting can have a positive impact on the company and increase the company's social value.

In addition, CSR is a means for companies to address social and environmental issues. Moreover, the increasing global emphasis on economic and environmental sustainability has spawned a trend that requires companies to disclose their corporate social responsibility activities. According to (Dewi & Monalisa, 2016), corporate social responsibility is a form of corporate governance, such as being involved in social and environmental issues caused by operational activities. Therefore, implementing corporate social responsibility will grow a sense of society's acceptance of the company's existence in the long term, which can provide economic benefits in the form of an increase in company value (Jitmaneeroj, 2018).

In carrying out green accounting and corporate social responsibility, other factors also affect firm value are institutional ownership and board size. Institutional ownership is defined as share ownership from specific organizations or institutions that have a role in capital of a company (Kusumawati & Setiawan, 2019). In addition, unlike non-institutional investors, institutional investors can use current-period earnings information to estimate future earnings. According to Umam & Halimah, (2021), agency conflicts can be minimized by institutional ownership. Hence, agency problems arise due to the diverse goals and interests of company management, which often conflict with the main objectives of the organization. This ignores the interests of investors or shareholders. Different goals directly result from managers who prioritize their desires.

Furthermore, the factor that affects firm value is board size. The board size refers to a number of directors and commissioners with complete authority and responsibility for decisions involving the direction, control, and oversight of resource management following corporate objectives. According to Farag & Mallin, (2019), the larger the board of directors, the greater the supervisory board, implying that more supervisors are required to watch and monitor a massive board of directors. In addition, a larger board size has the potential for more knowledge and experience so that it presents quality proposals to advance the company, which will ultimately improve company performance.

This study cites previous research (Egbunike & Okoro, 2018), that concluded no correlation exists between green accounting and profitability measures of non-consumer goods companies in Nigeria. The study was carried out by Indonesian manufacturing firms, making it distinct from other studies. Furthermore, previous research conducted by (Kao et al., 2019) conducted research on the impact of ownership structure, board of direction on company performance in Taiwanese companies. Moreover, research conducted by (Wirawan et al., 2020) examines the impact of CSR on firm value moderated by Risk Management. However, there are differences from previous studies in that this research sample uses manufacturing companies listed on the Indonesia Stock Exchange from 2017-2021. Not only that, this study adds a moderating variable, namely company performance as measured by profitability.

This study was conducted in response to comparable findings from prior research. This investigation seeks to determine the impact of green accounting, CSR, institutional ownership, and board size on firm value. This study also wants to determine if profitability success, a moderating variable, can link green accounting, CSR, institutional ownership, the board size, and firm value stronger or weaker. Performance was selected as the moderating variable because few studies still consider the probability of having a moderating impact.

Literature Review and Hypotheses Developments

Agency Theory

The relationship between shareholders (the principal) and management (the agent) of a firm is described by agency theory (Jensen, M.C., 1976). The agent's goal in this theory is to prosper shareholders so that the agent can work following the owner's interests. However, in practice, there are often conflicts between agents and owners or agency problems. Agency issues result from conflicting interests between the principal and the agent, so management breaches the contract with the principal by operating the company against the principal's claims (Panda & Leepsa, 2017).

According to Mukhtaruddin et al., (2014), there is a problem of interest between owners and managers because managers always act to follow the interests of the owner, giving rise to agency costs. However, the company has two interests, because each party seeks to achieve or maintain the desired level of wealth. Agency conflicts often occur in an effort to maximize company value can be minimized through the implementation of good corporate governance. In addition, the creation of this theory helps in developing several applications of governance mechanisms to regulate agent behavior in jointly owned businesses (Harun et al., 2020). Therefore, agency theory explains that principals and agents are likened to rational economic humans who are only tempted by their desires.

Signalling Theory

Signaling theory sends information to the company's stakeholders as a signal. This signal is knowledge about the status of the company that helps them determine what the owners want. This signal theory motivates companies to provide information to outsiders because management and outsiders have different amounts of information (Yasar et al., 2020). All information regarding the company, both financial and non-financial, must be included in the annual report. As a result, companies have valuable management in social and environmental accounting, as shown in the annual report. This indicates that management has adequate social and environmental control to increase the value of the company.

According to Ammarwaty et al., (2021), shareholders gain access to valuable company information through signal theory through public disclosure. Companies that disclose information send signals to investors or external parties that affect the value of the company. For investors, the more successful a company is, the more likely their investment will pay off. In addition, institutionalizing environmental disclosure will increase access to environmental performance for various stakeholders. The implementation of good green accounting and the company's decision to disclose environmental information indicate reduced disclosure risk. In addition, CSR activities are non-financial information that is required to be disclosed in the annual reports (Machmuddah et al., 2020). Therefore, this theory states that good companies will deliberately provide as complete information as possible as a positive signal to potential investors. Relevant information can reflect the company and can increase company value.

Green Accounting

Green accounting is the process of classifying, collecting, recording, measuring, and reporting environment-related costs incurred by companies in annual reports. Issues related to the environment and nature conservation are increasing the impact on companies. Hence, green accounting is considered as one of the solutions to solve existing environmental problems. Furthermore, companies can evaluate the benefits of the environmental costs incurred, then report them as financial information that investors can use to make decisions. Green accounting aims as a management communication tool for internal business decisions referring to the inclusion of environmental costs in corporate accounting practices (Ningsih & Rachmawari, 2017).

Green accounting is a way for companies to improve the economy by paying attention to environmental and community conditions (Chasbiandani et al., 2019). Environmental accounting involves companies disclosing environmental costs in their financial statements to balance the company's development with environmental functions and the distribution of benefits to society. Companies that implement green accounting will continuously strive to prevent environmental damage, thereby reducing their environmental costs and allowing them to generate profits without

compromising the environment. Environmental costs arise from the financial and non-financial sides that must be borne due to company activities. According to [Abdi et al., \(2020\)](#), environmental accounting costs voluntarily reported by companies have an impact on company profitability. Therefore, companies that pay attention to every aspect of the environment will have an impact on firm value.

Corporate Social Responsibility

Corporate social responsibility means that a company is responsible for its social, environmental and economic implications. The importance of corporate social responsibility to a company cannot be overstated. Many large and small organizations have undertaken these social responsibility activities. According to [Zenisek, \(1979\)](#), CSR is the willingness to ensure that human and economic resources are used for general social purposes, rather than for narrowly defined private and corporate interests. It further emphasizes that the means of production should be used so that production and distribution will enhance sustainable socio- economic welfare. All CSR efforts will be reported in the company's annual report.

According to [Carnahan et al., \(2010\)](#), CSR disclosure in financial statements is a voluntary action taken to reduce risk and benefit the morale of stakeholders. However, this type of disclosure can also be a signal to investors. Furthermore, many direct investors care that businesses are profit-driven and morally motivated. CSR disclosure increases firm value by lowering the environmental impact of other management strategies ([Godfrey, 2005](#)). The impact caused in carrying out aspects of the company's activities can be detrimental to society. Therefore, the company has an obligation to restore the state of the community that is affected by the activities that have been carried out by the company for the better

Institutional Ownership

Institutional ownership includes banks, insurance, investment management, pension fund, and other financial institution shares. Institutional ownership is critical in monitoring firm management since it can lead to increased optimal supervision. Additionally, institutional investors participate in strategic decision- making and do not readily accept earnings manipulation ([Jensen, M.C., 1976](#)).

Institutional ownership can oversee management in decision-making because it participates so as not to influence management actions ([Samasta et al., 2018](#)). Institutional ownership can significantly influence the stock market and company performance. High institutional ownership can indicate that the company is considered attractive by large and credible investors and can attract the interest of other investors. In addition, financial institutions that hold many shares can use their influence to influence corporate decisions or fight for changes that they consider favorable to shareholders.

Firm Size

Firm value can be used to quantify how important a firm is from the perspective of many stakeholders, such as investors, who identify a company's worth with its stock price. Maximizing company value is identical to maximizing share prices, and this is also what company proprietors want, as a high company value indicates shareholder prosperity ([Gultom et al., 2013](#)).

In addition, firm value is the potential purchase price of the company if it were to be sold. Outstanding debt and equity securities determine firm value. According to [Paulus Tahu & Djoko Budi Susilo, \(2017\)](#), Investors' perception of a company's success rate determines its company value, which is frequently correlated to stock pricing. A high stock price increases the value of a company. A high company value will persuade the market not just of the company's current success but also of its future potential.

Firm Performance

Company performance is a description of a company's financial condition as determined by financial analysis tools, so that it can be determined that a company's good and poor financial condition reflects its work performance in a given period. In light of environmental changes, resources must be used optimally. Consequently, the company's performance can be determined by its

profitability. Profitability is a percentage that measures the capacity of a business to generate profits (Mulyadi & Anwar, 2012).

Investors can use profitability as a signal since it shows that a company's performance is strong and that it has the ability to pay dividends (Dewi & Monalisa, 2016). Environmentally conscious management will propose the capabilities required to drive the company's financial performance.

Hypothesis 1 Development

Applying green accounting is the company's first step to minimizing environmental problems. Green accounting indicates the corporation cares about the environment by including environmental expenses in its financial accounts. In addition, companies that disclose environmental costs and allocate costs based on their activities in systematic environmental accounting can contribute well to delivering environmental accounting information. The company's submission of environmental accounting information will signal to investors that it has done environmental accounting well and expects it to positively impact the company's value.

A company that pays attention to every financial and non-financial aspect will affect the value of the company. For example, The application of green accounting that presents information related to the environment in the company's report will have an impact on the development and value of the company. Because investors will be interested in investing in the company and can provide confidence to investors. According to Buana & Nuzula, (2017) states that environmental costs affect company value. Green accounting generates valuable information on environmental managers for decision-making, which increases company profits and value if properly implemented by the company (Agustia et al., 2019). According to Chasbiandani et al., (2019), green accounting can boost the value of a company. Based on this research, the following hypothesis can be made:

H1: Green accounting has a positive impact on corporate value.

Hypothesis 2 Development

Corporate social responsibility is reported in annual report or sustainability reports. The signal theory states that companies with formal policies, like CSR reporting, will send positive signals to the market. Likewise, people who give good information to stakeholders will send positive signals to the business. CSR disclosure that complies with shareholder expectations sends a positive message about the company's future and boosts its value.

CSR is a form of activity carried out by companies to improve the economy and quality of life of employees and the surrounding community. CSR disclosure can improve the company's image in the view of investors and financial analysis of sales can increase stock prices. When the company's stock price increases, the company's value can increase. According to Tunpornchai & Hensawang, (2018), corporate social responsibility increases firm value. Additionally, research conducted by (Hu et al., 2018) shows, CSR positively affects a company's value. According to research (Ogachi & Zoltan, 2020) CSR has a positive relation with company value. The hypothesis for this research is:

H2: Corporate Social Responsibility has a impact on firm value.

Hypothesis 3 Development

The existence of institutional ownership in a company will encourage an increase in more optimal supervision of management performance, so as to prevent manager behavior that is concerned with its own interests and will ultimately harm company owners. Supervision carried out by institutional investors is highly dependent on the amount of investment made. The greater the institutional ownership, the greater the urge to optimize company value. In addition, institutional ownership can oversee management in decision-making because it participates so that it does not affect management performance. The high agency problem of active institutional investors in management performance will increase company value.

According to Jensen, M.C., (1976), the concept of agency theory indicates that the greater the percentage of shares owned by institutional investors, the greater the impactiveness of supervisory activities because managers' opportunistic behavior can be regulated. According to research by (Kao et al., 2019), institutional ownership positively influences firm value. According to online research (Tunpornchai & Hensawang, 2018), institutional ownership affects firm value. Meanwhile, according

to Umam & Halimah, (2021) shows institutional ownership does not impact firm value. Therefore, the suggested hypothesis is as follows:

H3: Institutional ownership has a positive impact on the value of a company.

Hypothesis 4 Development

Board size oversees decision-making to ensure company goals are met. Therefore, the decisions align with the organization's objectives and benefit all parties. The company's worth will rise, whereas wrong actions will lower it. Companies that carry out supervision and control require more boards for better results. Thus, good supervision will be seen as good by investors in order to boost the value of the company.

Board size has the aim of overseeing decision making so that decisions are made in accordance with company goals. If the decision taken is not correct, it will cause a decrease in firm value. Conversely, if the decisions made by the board are in accordance with the company's objectives and benefit all parties, the company value will increase. According to Jasmine & Shofawati, (2020) shows that board size impacts firm value. The management of opportunity-seeking behavior is more impactively monitored when the board is more giant (Kurniawati, 2016). In addition, research Muharam et al., (2020) indicates that board size influences the value of a company. Meanwhile, research findings Kao et al., (2019) indicate that board size does not affect firm value. Therefore, the following hypothesis is made:

H4: Board size has a positive impact on corporate value.

Hypothesis 5 Development

Profitability is a metric to evaluate a business's capacity to profit. The link between green accounting and corporate value is reinforced when operations are profitable. Green accounting will increase the firm's worth if it makes money. While providing helpful environmental disclosures, the corporation cannot make a profit. The greater the worth of the firm, the greater its profits. Environmental cost disclosure is also a way for firms to demonstrate their environmental responsibilities and preserve their credibility. Companies that manage every facet of their operations meticulously will see a rise in stock price. The hypothesis may therefore be stated as follows:

H5: Performance strengthens the impact of green accounting on firm value.

Hypothesis 6 Development

Profitability is the company's capacity to create net income from operations in the accounting period, which will be used to distribute dividends. The more the dividend, the more money it will save the investor in capital expenditures, making profitability a key consideration for investors. Meanwhile, managers raise their stakes due to dividends earned from the company's success.

Since some for-profit businesses see CSR program implementation as part of their duty to grow shareholder value, increased profitability may positively impact CSR. Based on Mukhtaruddin et al., (2019)'s study, ROA has dramatically enhanced the connection from corporate governance and CSR. The better the firm's performance in promoting social and environmental responsibility, the more interested investors will be in investing their shares in the company, increasing its value. Research by Rahmantari et al., (2019) indicates that profitability is not a moderating variable between CSR and business value. It leads to the following hypothesis:

H6: Performance strengthens the influence of CSR on firm value.

Hypothesis 7 Development

The stock price is a good indicator of a company's success in increasing its value, and success is measured by its ability to generate profits. Profitability is an efficient evaluation tool for operational performance in company performance and an indicator of a company valuation. Institutional ownership is a condition of involvement of many parties providing working capital that optimizes several performances from each field, such as foreign, private, and government institutions that provide optimal encouragement.

According to studies Rahmawati et al., (2021), the connection between institutional ownership and business value is tempered by profitability. According to Budiharjo, (2021), profitability

as moderation does not affect institutional ownership and business value. The given description suggests the following hypothesis:

H7: Performance strengthens the impact of institutional ownership on firm value.

Hypothesis 8 Development

Board size is an important component in enhancing firm value since the board has the ability to govern and grow the business. Companies with a small board size will be able to increase firm value further because companies with many directors will be more challenging to monitor and less impactful in communicating. Meanwhile, a large board size will be able to increase firm value because a large number of boards can increase supervision within the company.

Previous research conducted Johl et al., (2015) claims that a significant positive impact is caused by The magnitude of the board of directors on business prosperity. The economic efficacy of the enterprise is significantly augmented by the size of the board, according to in-line study (Isik & Riza Ince, 2016) which was conducted on 30 sample Turkish banks. However, research by Yan et al., (2021) shows that the dimensions of the board may have an adverse impact on the attainment of organizational prosperity. Consequently, the following is the theory:

H8: Performance strengthens the influence of board size on firm value.

Based on the description above, the hypothesis in this research is presented in the following framework:

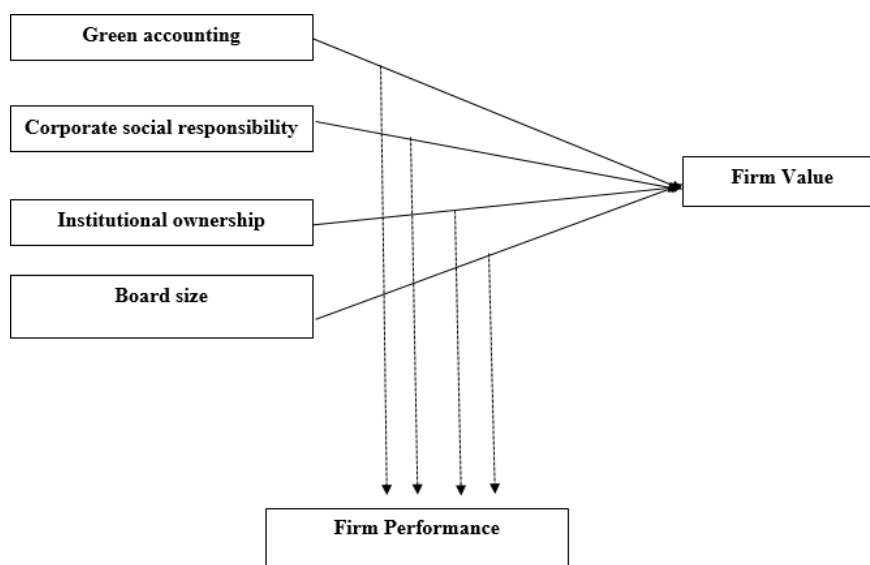


Figure 1 Research Model

Sources: Processed Data

Research Methods

Secondary Data Collecting and Processing

This study utilizes a quantitative methodology that aims to understand the relationship between two or more variables, as well as to verify and confirm existing hypotheses through the use of statistical data analysis. This analysis's data type is secondary data from the Indonesia Stock Exchange (IDX), with research data sources taken from the official website (www.idx.co.id).

The manufacturing companies listed on the IDX from 2017 to 2021 serve as samples for this study. This study used purposive sampling for data collection and sample selection (Sugiyono, 2013). Therefore, the sample criteria are:

1. Sample population listed on the IDX from 2017-2021.
2. Companies that present annual reports from 2017 to 2021 completely and have been audited.
3. Financial statements and annual reports provide the required information, companies that use Indonesian Rupiah (IDR).
4. Companies that environmental costs and CSR disclosures. Pertaining to the calculation of the

study's variables.

Dependent Variable

The dependent variable in this study is company value as measured by Tobin's Q. According to (Wirawan et al., 2020), A hypothetical statistic based on stock prices is Tobin's q ratio. Thus, Tobin's q was chosen in this study because it can reflect the company's assets comprehensively. Based on a research investigation conducted by (Kao et al., 2019) and (Nekhili et al., 2017), to calculate the firm value, apply the formula below:

$$Tobin's\ Q = \frac{Market\ Value\ Equity + Debt}{Total\ Asset}$$

Independent Variables

Green Accounting

In measuring green accounting in this study, environmental costs will be used. According to Rounaghi, (2019), environmental costs are financial information from company activities regarding environmental management efforts. The study's choice of environmental costs was made to offer data on the distribution of environmental expenses that may have an impact on the organization's accounting system. Thus, the method of measuring environmental costs can be obtained from the following formula referring to research (Egbunike & Okoro, 2018):

$$EC = \sum Environmental\ Costs$$

Net Income After Tax

This study uses measurements that refer to the Global Reporting Initiative (GRI). CSR disclosure according to GRI G4 has three indicators:

- Economic indicators (consisting of 9 items);
- Environmental indicators (consisting of 34 items); and
- Social indicators (consisting of 48 items).

The three indicators are explained into 91 disclosure items. According to Wirawan et al.,(2020), the scoring method in the GRI G4 index is given a different weight on each item. A score of 1 will be awarded to the firm if it reveals the information item, and a score of 0 will be assigned if it does not. Furthermore, scores are summed up on each indicator. The following is the calculation formula for corporate social responsibility:

$$CSRI_j = \frac{\sum x_{ij}}{n_j}$$

CSRIj: Corporate Social Responsibility Company Index

Nj: Number of corporate Social Responsibility disclosure criteria j, nj < 91 Xij: dummy variable: 1 = if item i is disclosed; 0 = if item i is not disclosed

Institutional Ownership

The metric of institutional ownership refers to the percentage of shares that are possessed by institutions. As stated in the research conducted by (Mukhtaruddin et al., 2014), institutional ownership represents the act of possessing shares of business shares whose firm ownership is held by an institution or organization. To calculate the institutional ownership variable in the study by (Kao et al., 2019), the equation reads as follows:

$$Institutional\ Ownership = \frac{Total\ Number\ of\ Institutional\ Share}{Total\ Number\ of\ Outstanding\ Share}$$

Board Size

The board's size, as mentioned by (Kao et al., 2019) pertains to the quantity of individuals serving as board members within a corporation. It is also referred to as the number of directors on the

board will also contribute to a company's success. The formula for determining board size is as follows:

$$\text{Board size} = \text{The total number of directors on the board}$$

Moderating Variable

Since profitability is based on ROA, it serves as the moderating variable in this study. The business's capacity to turn a profit while utilizing its resources is measured by a ratio called profitability (Lestari & Restuningdiah, 2021), the profitability formula used is as follows:

$$\text{Return on Asset} = \frac{\text{Net Profit}}{\text{Total Asset}}$$

Control Variable

Leverage

This study it is using the first control variable, namely leverage. Debt to asset ratio is another name for leverage. The DAR represents the ratio of a corporation's overall liabilities to its overall possessions. According to Kao et al., (2019) and Nekhili et al., (2017), the following is the formula for measuring leverage:

$$\text{LEV} = \frac{\text{Total Liabilities}}{\text{Total Asset}}$$

Firm Size

The study's second control variable is firm size. Firm size is a metric that can be utilized to classify and group organizations based on their magnitude of a company's size. The formula used is as follows Kao et al., (2019) and Nekhili et al., (2017):

$$\text{Firm Size} = \text{Log Natural (Total Asset)}$$

Classical Assumption Test

A linear regression model tool in research aimed at ascertaining whether the regression model has accurate, consistent, and unusual estimates. In addition, the classic assumption test is useful for ensuring for determining if the sample's data are regularly or abnormally distributed, with the absence of autocorrelation, multicollinearity, and heteroscedasticity. In this study, the following is the standard test for premises:

Panel Data Model

In this study, the analysis model uses multiple linear regression and E-views 12 analysis tools. Because it is a mix of two data, a cross-section with time series from 2017 to 2021, the regression equation used for measurement employs panel data.

This study uses the following equation:

$$FV = \alpha + \beta_1 XGA + \beta_2 XCSR + \beta_3 XIO + \beta_4 XBSIZE + \beta_5 LEV + \beta_6 CFSIZE + \beta_7 ZROA + \beta_8 XGA * Z + \beta_9 XCSR * Z + \beta_{10} XIO * Z + \beta_{11} XBSIZE * Z + \beta_{12} LEV * Z + \beta_{13} FSIZE * Z + \epsilon$$

Where:

Y = Firm Value α = Constant

$\beta_1 - \beta_{13}$ = Regression coefficient

XGA = Green accounting

XCSR = Corporate social responsibility XIO = Institutional ownership

XBSIZE = Board size Z = ROA

CLEV = Leverage CFSIZE = Firm size ϵ = Standard error

Panel Data Regression Estimation Method

According to Widarjono (2005) the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) are model of the three equations that are frequently employed in the selection of techniques for estimating the optimal test model with panel data.

Researcher Model Estimation Selection

Estimation researcher model can be selected based on the parameter condition of panel data. Choosing the appropriate model to use according to the research situation when you want to manage

panel data, several tests can be done as follows:

Chow test

The utilization of the fixed effect or random effect model is ascertained employing the Chow test within this investigation. The ensuing is the testable hypothesis:

- a. The Common Effect Model is the most appropriate model in cases when the probability value $> \alpha$ (significance threshold 0.05), in which case H_0 is approved.
- b. The Fixed Effect Model is the best model to use if the probability value $< \alpha$ (significance threshold of 0.05) is disregarded.

Hausman test

The Hausman test is a statistical examination conducted subsequent to the Chow test, yielding results when employing the fixed effect model. Consequently, it becomes imperative to execute the Hausman test for ascertaining the superior suitability between the fixed effect and random effect models through hypothesis testing within the context of this research:

- a. The Random Effect Model is the optimal paradigm to employ when the p- value surpasses the designated significance threshold of 0.05, thus signifying the acceptance of the null hypothesis (H_0).
- b. If the null hypothesis is rejected at a significance level of 0.05, the Fixed Effect Model is the most suitable model to employ.

Lagrange Multiplier Test

If the Hausman test's chosen model exhibits a random effect model, the test for the lagrange multiplier is run. The random effect concept is then put to the test to see if it holds up or the CEM should be used:

H_0 : Common Effect Model H_1 : Random Effect Model

- a. If the LM statistic exceeds the critical chi-squared value, the null hypothesis (H_0) is rejected and the p-value indicating significance is less than 0.05. The optimal estimation approach for the panel data regression model is the Random Effects Model.
- b. The null hypothesis (H_0) is accepted when the p-value is greater than 0.05 and the LM statistic value is lower than the critical chi-square statistic value. The most suitable estimation method for the panel data regression model is the Common Effect Model.

Hypothesis Testing

This research use moderated regression model to test the hypotheses.

Results and Discussions

Sample Selection

The objects used are manufacturing sector companies listed on the IDX for the period 2017 until 2021, then selected using a purposive sampling method using several criteria. The selection results by the sample criteria were 46 companies and 230 data that met the criteria. Data selection criteria can be seen in Table 1.

Table 1 Sample Calculation

No	Criteria	Total Companies	Total Data
1	Total sample population listed on the Indonesia Stock Exchange (IDX) from 2017-2021	271	1.355
2	Companies that do not publish annual reports from 2017-2021	(96)	(480)
3	Companies that do not use rupiah in their reporting	(53)	(265)
4	Companies that do not use report environmental costs and Corporate Social Responsibility disclosures. Related to calculating the variables used in the study.	(76)	(380)
Total		46	230

Sources: Processed Data

Descriptive Analysis

Table 2 Descriptive Statistics

	FV	GA	CSR	IO	BS	ROA	LEV	SIZE
Mean	1.398784	0.067678	0.194028	0.707041	5.669565	0.044182	0.493148	29.29432
Maximum	7.778475	2.726815	0.527473	1.914201	14.00000	0.607168	2.899874	32.82039
Minimum	0.358588	-0.138632	0.109890	0.021187	2.000000	-0.376701	0.063029	26.27686
Std. Dev.	0.924004	0.280828	0.100930	0.273459	2.308979	0.084284	0.281819	1.586111
N	230	230	230	230	230	230	230	230

Sources: Data Processed

Table 4.2 shows that the company value variable shows an average value of 1.398784 with a standard deviation of 0.924004 indicating very good data quality for this variable or uniformly distributed because the average is larger. The maximum of the firm value variable is 7.778475. Conversely, 0.358588 is the lowest value.

Descriptive statistical analysis of green accounting variables shows an average value of 0.067678 with a standard deviation of 0.280828, suggesting that the data quality for these variables is quite excellent or that the distribution is uniform since the average exceeds the standard deviation. The maximum of the green accounting variable is 2.726815. Otherwise, -0.138632 is the lowest value.

It can be seen that the data quality for this variable is quite good or decently well-balanced or that the distribution because an average value is revealed by descriptive statistical analysis for the corporate social responsibility variable of 0.194028 with a standard deviation 0.100930. The maximum of the corporate social responsibility variable is 0.527473. Conversely, 0.109890 is the lowest value.

Institutional ownership variables' descriptive statistical analysis produces an average also standard deviation is 0.707041 and 0.273459, showing distribution is uniform or that the data quality for these variables is pretty strong since the average exceeds the standard deviation. Ownership by institutions variable's lowest value is 0.021187, while its maximum value is 0.273459.

Descriptive statistical analysis of the board size variable utilizing a standard deviation also an average value is 2.308979 and 5.669565, it can be shown that the data quality for this variable is fairly excellent or that the distribution is uniform therefore the standard deviation is lower than the average. Lowest value is 2.000000, and its largest value is 14.00000.

Descriptive statistical analysis of the ROA variable shows a mean value also a standard deviation is 0.044182 and a 0.084284, It is clear from data quality for this variable is poor or the distribution is uneven since the average value is lower. The profitability variable's lowest value is -0.376701, while its greatest value is 0.607168.

Descriptive statistical analysis of the leverage variable shows a mean value also a standard deviation is 0.493148 and 0.281819, observation that the data quality for this variable is fairly excellent and that the distribution is uniform as a result of the standard deviation being lower than mean. Lowest and greatest values are 0.063029 and 2.899874, respectively.

The company size variable's descriptive statistical analysis produces a result with mean value also standard deviation is 29.29432 and 1.586111, suggesting that the distribution is uniform or that the data quality for this variable is pretty excellent. The factor of firm size has a range of values between 26.27686 and 32.82039.

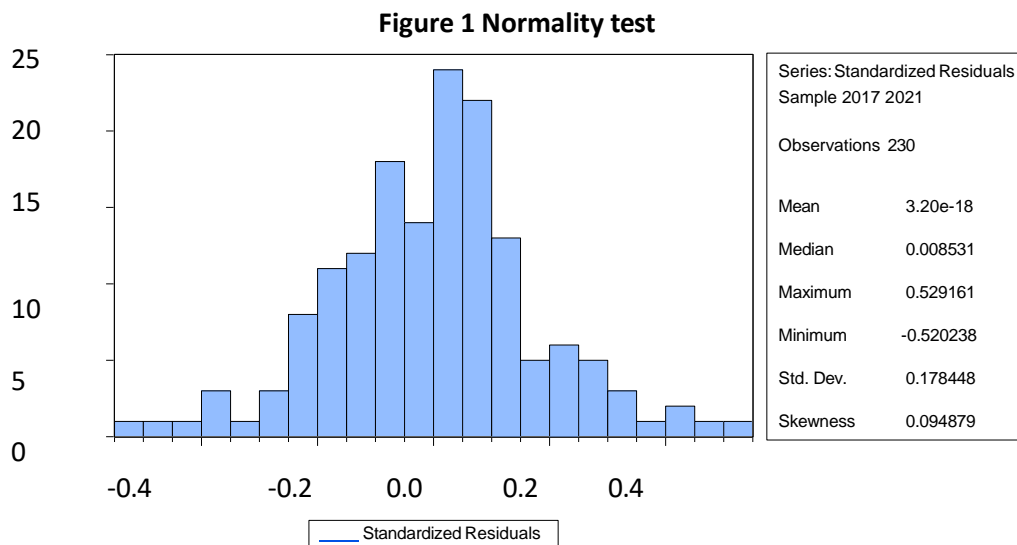
Classical assumption

The classical assumption test aims to ascertain whether there is estimation accuracy, consistency, and absence of bias in the regression model used. The tests for normality, multicollinearity, heteroscedasticity, and autocorrelation are included in this study's classical

assumption test.

Normality test

The normality test aims to ensure that the residual value is normally distributed or not. In this study, the *Jarque-Bera* (J-B) test was utilized as a normalcy test. The *Jarque-Bera* (J-B) test are shown in Figure 4.3.1.



Source: proceeds by Eviews 12

Based on the figure above, it can be seen that the probability value of the J- B statistic is 0.149665. It can show that the residual data has followed a normal distribution because the p-probability value of 0.149665 is greater than the significance level of 0.05. Therefore, based on the normality test, the data in this study are normally distributed, or the normality assumption test is met.

Multicollinearity test

The multicollinearity test is used to check if the variables in the regression model are related. There are two measures that may be used to assess if multicollinearity occurs in a study: tolerance and VIF. There are no concerns with multicollinearity in the research when the tolerance value > 0.10 and the VIF value < 10. Table 4.3.2 lists the outcomes of the multicollinearity test.

Table 3 Multicollinearity test

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.154109	127.2429	NA
GA	0.000760	13.46751	2.238030
CSR	0.007802	20.75883	1.311165
IO	0.008625	2.578132	1.316195
BSIZE	0.019648	48.81706	2.378034
SIZE	0.001986	1.044581	1.039629
ROA	0.003200	30.55730	3.187875
GA*ROA	138.9301	1.928110	1.590756
CSR*ROA	37.47188	7.154556	6.950053
IO*ROA	3.599002	11.80853	6.094177
BSIZE*ROA	0.083161	16.89883	8.065517
LEV*ROA	0.364984	2.640047	2.319439
SIZE*ROA	0.001287	8.284081	8.125671

Source: proceeds by Eviews 12

The table illustrates that each variable has a tolerance value above 0.1 and a VIF value lower than 10. Therefore, this model does not have a multicollinearity problem.

Heteroscedasticity test

Examining the likelihood of mistakes and residuals using the heteroscedasticity test from the regression model to ensure no similarity between observed variables. Table 4.3.3 displays heteroscedasticity test.

Table 4 Heteroscedasticity test

F-statistic	1.416609	Prob. F(13,179)	0.1553
Obs*R-squared	18.00398	Prob. Chi-Square(13)	0.1574
Scaled explained SS	25.75212	Prob. Chi-Square(13)	0.0184

Source: proceeds by Eviews 12

The Breusch-Pagan test findings yielded the Prob based on this table. $0.1553 > 0.05$ for the chi-Square statistic. So, the model is free from heteroscedasticity problems.

Autocorrelation test

Tests are used to establish if confounding errors in a regression model are correlated between one period and the one before it. The Durbin-Watson test was used in this investigation for autocorrelation analysis. The Durbin-Watson test's statistical result falls between 0 and 4. Table 4.3.4 test findings.

Table 5 Autocorrelation test

Durbin-Watson stat	1.410940
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Source: proceeds by Eviews 12

Based on the table above the value of the Durbin-Watson statistic is 1.410940. Note that the value of the Durbin-Watson statistic lies between 1 and 3, namely $1 < 1.410940 < 3$, then the non-autocorrelation assumption is met. In other words, there is no high autocorrelation in the residuals.

Panel Data Regression Test Results

In this study, three-panel regressions were utilized to find the best suitable model, and there were several models used, comprising the Chow Test, Hausman Test, Random Effect Model, Fixed Effect Model, and Lagrange Multiplier Test. The results of the three regression models that were derived from the output of Eviews 12 are listed below before these tests are run.

Common Effect Model (CEM)

This test uses CEM method to obtain the following results:

Table 6 CEM Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.525857	1.745212	2.020303	0.0446
GA	-0.058291	0.220436	-0.264437	0.7917
CSR	0.482674	0.937476	0.514866	0.6072
IO	0.199342	0.241012	0.827104	0.4091
BFSIZE	0.055328	0.039614	1.396659	0.1639
LEV	0.849688	0.225283	3.771655	0.0002
SIZE	-0.112509	0.066318	-1.696515	0.0912
ROA	-49.81579	25.49697	-1.953793	0.0520
GA*ROA	-5.339525	18.48644	-0.288835	0.7730
CSR*ROA	-22.72517	13.54958	-1.677185	0.0950
IO*ROA	-0.229408	4.423996	-0.051855	0.9587

BSIZE*ROA	0.643498	0.556266	1.156818	0.2486
LEV*ROA	-2.695695	2.112319	-1.276178	0.2033
SIZE*ROA	1.914956	0.936519	2.044760	0.0421
<hr/>				
Root MSE	0.835615	R-squared		0.178595
Mean dependent var	1.398784	Adjusted R-squared		0.129159
S.D. dependent var	0.924004	S.E. of regression		0.862270
Akaike info criterion	2.600443	Sum squared resid		160.5982
Schwarz criterion	2.809717	Log likelihood		-285.0509
Hannan-Quinn criter.	2.684860	F-statistic		3.612632
Durbin-Watson stat	0.537125	Prob(F-statistic)		0.000036

Fixed Effect Model (FEM)

Table 7 FEM Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	24.51955	6.222471	3.940485	0.0001
GA	-0.244612	0.154158	-1.586765	0.1144
CSR	-1.981974	0.876946	-2.260085	0.0251
IO	-1.608934	1.070332	-1.503210	0.1346
BSIZE	0.090186	0.068268	1.321052	0.1882
LEV	0.369243	0.261453	1.412274	0.1597
SIZE	-0.770756	0.212330	-3.629987	0.0004
ROA	33.20854	25.47622	1.303512	0.1942
GA*ROA	94.59541	45.12804	2.096156	0.0375
CSR*ROA	26.30725	10.18441	2.583091	0.0106
IO*ROA	-6.072092	3.664191	-1.657144	0.0993
BSIZE*ROA	0.617892	0.449631	1.374219	0.1712
LEV*ROA	-3.480654	1.638362	-2.124472	0.0351
SIZE*ROA	-1.103651	0.940009	-1.174085	0.2420

Effects Specification

Cross-section fixed (dummy variables)

Root MSE	0.449955	R-squared		0.761833
Mean dependent var	1.398784	Adjusted R-squared		0.681051

S.D. dependent var	0.924004	S.E. of regression	0.521837
Akaike info criterion	1.753703	Sum squared resid	46.56558
Schwarz criterion	2.635645	Log likelihood	-142.6758
Hannan-Quinn criter.	2.109461	F-statistic	9.430756
Durbin-Watson stat	1.410940	Prob(F-statistic)	0.000000

Random Effect Model (REM)

This test makes use of the REM to provide the following results:

Table 8 REM Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.562633	2.220405	1.604497	0.1101
GA	-0.162273	0.148710	-1.091205	0.2764
CSR	-1.734872	0.782658	-2.216640	0.0277
IO	0.158152	0.370551	0.426802	0.6699
BSize	0.080848	0.046597	1.735029	0.0842
LEV	0.709169	0.202759	3.497586	0.0006
SIZE	-0.101753	0.080086	-1.270539	0.2053
ROA	0.042403	22.60240	0.001876	0.9985
GA*ROA	36.77801	25.23152	1.457622	0.1464
CSR*ROA	11.02477	9.517435	1.158376	0.2480
IO*ROA	-7.746469	3.424584	-2.262018	0.0247
BSize*ROA	0.485527	0.419987	1.156052	0.2489
LEV*ROA	-4.426839	1.521229	-2.910040	0.0040
SIZE*ROA	0.222682	0.826068	0.269568	0.7877
Effects Specification				
			S.D.	Rho
Cross-section random			0.638648	0.5996
Idiosyncratic random			0.521837	0.4004
Weighted Statistics				
Root MSE	0.538080	R-squared	0.188704	
Mean dependent var	0.480089	Adjusted R-squared	0.139875	
S.D. dependent var	0.598692	S.E. of regression	0.555244	
Sum squared resid	66.59194	F-statistic	3.864656	
Durbin-Watson stat	1.034242	Prob(F-statistic)	0.000013	

Unweighted Statistics			
R-squared	0.093370	Mean dependent var	1.398784
Sum squared resid	177.2613	Durbin-Watson stat	0.388535

Estimation Effect Models Selection

Chow test

The Chow test was used to assess if the fixed effect or common effect model should have been applied in this investigation. The Chow test findings are as follows:

Table 9 Chow test

Effects Test	Statistic	Prob.
Cross-section Chi-square	284.750123	0.0000

Source: proceeds by Eviews 12

In table 9 chow test result, it can be seen that the probability value is 0.0000 (sig < 5%), so Ho is rejected and the best model is Fixed Effect Model (FEM).

Hausman test

The fixed effect and random effect models were compared using the Hausman test. The results of the Hausman test are as follows:

Table 10 Hausman test

Test Summary	Chi-Sq. Statistic	Prob.
Cross-section random	41.541580	0.0001

Source: proceeds by Eviews 12

Table 10 the results of the hausman test. It can be seen that the probability value is 0.0001 (sig < 5%), then Ho is rejected and the best model is Fixed Effect Model (FEM).

Fixed Effect Selected Regression Model Results

Based on the analysis of the effect model selection test using E-views 12, the appropriate effect model is to utilize the Fixed Effect Model (FEM). Therefore, researchers may build an equation for this regression testing panel generated from the panel estimate findings. The following is the equation for this regression model:

$$FV = 24.51955 - 0.244612GA - 1.981974CSR - 1.608934IO + 0.090186BSIZE - 0.770756LEV + 0.369243SIZE + 33.20854ROA + 94.59541GA * Z + 26.30725CSR * Z - 6.072092IO * Z + 0.617892BSIZE * Z - 3.480654LEV * Z - 1.103651SIZE * + \epsilon$$

Hypothesis Testing

F-test

The F statistical test aims to determine whether the independent variables in the study can jointly influence the dependent variable. The significance's size value provides insight into the findings of the F statistical test. The independent factors examined with the dependent variable have a significant impact when the sig. Value < 0.05. These are outcomes of F-test:

Table 11 F-test

F-statistic	9.430756
Prob(F-statistic)	0.000000

Source: proceeds by Eviews 12

Based on the result above, Prob (F-statistic) has a value of 0.000000, meaning less than 0.05. Green accounting, CSR, institutional ownership, and board size with moderating company performance affect firm value.

T-test

A significance threshold of 0.05 was used in this investigation. It may be said when the

significance level < 0.05 , it may be claimed that the independent variable has little impact on the dependent variable. These are the t test's findings.

Table 12 t-test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	24.51955	6.222471	3.940485	0.0001
GA	-0.244612	0.154158	-1.586765	0.1144
CSR	-1.981974	0.876946	-2.260085	0.0251
IO	-1.608934	1.070332	-1.503210	0.1346
BSIZE	0.090186	0.068268	1.321052	0.1882
LEV	0.369243	0.261453	1.412274	0.1597
SIZE	-0.770756	0.212330	-3.629987	0.0004
ROA	33.20854	25.47622	1.303512	0.1942
GA*ROA	94.59541	45.12804	2.096156	0.0375
CSR*ROA	26.30725	10.18441	2.583091	0.0106
IO*ROA	-6.072092	3.664191	-1.657144	0.0993
BSIZE*ROA	0.617892	0.449631	1.374219	0.1712
LEV*ROA	-3.480654	1.638362	-2.124472	0.0351
SIZE*ROA	-1.103651	0.940009	-1.174085	0.2420

Source: proceeds by Eviews 12

Hypothesis 1 Results and Discussion

A research variable, yielded a -0.219099 regression coefficient, significance 0.1144 as the outcomes of hypothesis testing. Green accounting does not substantially influence business because $0.1144 > 0.05$ is a greater significance value than 0.05. The first hypothesis, the impact green accounting on company value, may thus be **rejected**.

These outcomes demonstrate that the company's disclosure of environmental costs has yet to inspire investor confidence in the company's valuation. Therefore, it has no bearing on the company's current levels of sales or earnings. In addition, environmental activities conducted by the company are included in the activity report for the CSR costs of the company. Therefore, the presence or absence of green accounting in a company's financial statements will not impact the company's value. These results align with previous research (Astuti et al., 2022), It demonstrates how little impact green accounting has on corporate value. Additionally, studies by Pantamee, (2019) results demonstrate how green accounting significantly affects company worth. However, conflict with those of the study (Aboud & Diab, 2018), which claim that green accounting increases corporate value.

Hypothesis 2 Results and Discussion

The results of testing the claim in this study for the measure of corporate social responsibility were a regression coefficient of -1.981974 and a significance of 0.0251. Corporate social responsibility substantially impacts business value, with a p-value of $0.0251 < 0.05$. The second hypothesis, the impact corporate social responsibility on company value, may thus be **accepted**.

The findings of this study are consistent with the signaling theory, which states that companies are encouraged to signal investors with financial and non- financial information. Companies may signal their stakeholders by including CSR information in their annual reports. However, to become a medium for evaluating stakeholders' willingness to spend money in the firm, they must be reacted to appropriately and successfully.

This result is in line with previous research Afifah et al., (2021) which states that CSR has a negative effect on firm value. Furthermore, research conducted by Xu et al., (2020), It claims that exercising social responsibility benefits and considerable impact on enterprise value. Companies with CSR activities that have been publicly disclosed have a better reputation in the community and among business people because they are more inclined to weigh the interests of shareholders in the equation and stakeholders, which affects the firm's value. However, this study's results differ from

those Yuliana & Juniarti, (2015) the fact that CSR has no measurable effect on a company's value. This demonstrates that the business's CSR disclosures are not responsive to changes in firm value. Investors do not use CSR disclosure as a foundation for choosing which companies to invest in. CSR is considered not to provide added value that can benefit investors.

Hypothesis 3 Resuts and Discussion

Institutional ownership's regression coefficient is -1.608934, and its significance is 0.1346 in the study's evaluation of the hypothesis. The significance value of $0.1346 > 0.05$ suggests that institutional ownership has minimal effect on a company's value. As a result, the third claim that institutional ownership influences business value is **rejected**.

The findings of this study contradict agency theory, which holds that institutional ownership can be an effective internal control mechanism for resolving agency conflicts that endanger company value. The fact that institutional ownership has little impact on business value suggests it cannot be utilized to promote firm value since an increase or reduction in percentage of institutional ownership has no impact. Additionally, institutional investors, who more skilled in business and finance, are rarely involved in strategic decision-making and frequently rely completely on management. Institutional investors are not involved enough for management to feel their oversight and control, which negatively affects stock prices and company value. An investigation conducted by Kao et al., (2019), institutional ownership has an impact on corporate value, although research are in conflict that finding. Investors may be hesitant to make an investment in the firm because of the substantial institutional ownership. However, this research aligns with research conducted by (Sari & Wulandari, 2021).

Hypothesis 4 Resuts and Discussion

Results from testing the null hypothesis showed that the regression coefficient for board size was 0.090186, with a significance level of 0.1882. The board size does not significantly affect business as a result of the importance value being $0.1882 > 0.05$. Consequently, the fourth theory that board size influences business value favourably is **rejected**.

A large board will prevent the company-beneficial conversation, and many members also impact the length of time it takes to express opinions in large groups, resulting in a lack of cohesiveness among the board members. According to this study The value of the corporation was unaffected by the size of the board of directors. The absence of a connection between board size and firm value also suggests that is unable to supervise the course of decisions taken so that managers can still carry out their opportunistic actions and have no major effect on overcoming agency conflicts that occur. The study's findings conflict with studies carried out by Kao et al., (2019) that board size can affect firm value. To solve agency issues, a sizable board of directors is required (Munisi et al., 2014). However, research Alda Nadya Mastuti & Prastiwi, (2021) shows that board size does not impact business value.

Hypothesis 5 Resuts and Discussion

Based on the findings, this research hypothesis examines 6the relationship between green accounting on firm value and performance. The results of this research hypothesis obtained a coefficient value of 94.59541, and a significance of 0.0375. Because the significance value of $0.0375 < 0.05$, performance strengthens the relationship between green accounting and firm value. Therefore, the fifth hypothesis that performance strengthens the relationship between green accounting and firm value can be **accepted**.

These results indicate that performance as moderation can increase the relationship between green accounting and firm value. Company performance will increase proportionally to how well the company discloses green accounting. Companies that disclose their environmental costs have concern for the environment and pay attention to every aspect of their activities, thus affecting the company's value. This result is in line with Pratiwi & Rahayu, (2018), which states that company profitability can reduce the impact of green accounting on stock prices.

Hypothesis 6 Resuts and Discussion

Based on the findings, this research hypothesis examines the relationship between CSR and

firm value and performance. The results of this research hypothesis obtained a coefficient value of 26.30725, and a significance of 0.0106. Because the significance value of $0.0106 < 0.05$, performance strengthens the relationship between CSR and firm value. Therefore, the sixth hypothesis that performance strengthens the relationship between corporate social responsibility and firm value is **accepted**.

This result shows that performance can strengthen the relationship between CSR and firm value. Companies with high performance and commitment to corporate social responsibility will be recognized by the public as companies that operate legally in the eyes of the public. The better the CSR disclosure, the lower the firm value, but the firm value will increase in companies that have high performance. Therefore, it is reflected in the increasing value of the company as a result of CSR disclosure and the high financial performance produced by the company. The result backs previous studies by Mukhtaruddin et al., (2019), which discovered that the relationship between CSR and business value might be altered by profitability. It contradicts a research by Rahmantari et al., (2019), The link between corporate social responsibility and company value is unaffected by any mitigating factors.

Hypothesis 7 Results and Discussion

Based on the findings, this research hypothesis examines the relationship between institutional ownership on firm value and performance. The results of this research hypothesis obtained a coefficient value of -6.072092 and a significance of 0.0993. Because the significance value of $0.0993 > 0.05$, performance weakens the relationship between institutional ownership and firm value. Therefore, the seventh hypothesis that performance strengthens the relationship between institutional ownership and firm value can be **rejected**.

These results indicate that performance does not moderate the relationship between institutional ownership and firm value. Because the higher the proportion of institutional ownership, the higher the pressure from various company investors to increase corporate profits. Therefore, institutional ownership has an important role in a company as a source of capital, but this is not enough to provide added value to the company. Increasing or decreasing institutional ownership will not affect firm value. The results of this study are not in line with research conducted by (Rahmawati et al., 2021) that profitability can strengthen ownership of other companies it affects firm value. However, in line with research Novalia, (2016), profitability cannot moderate institutional ownership on firm value.

Hypothesis 8 Results and Discussion

Based on the findings, this research hypothesis examines the relationship between board size and firm value with performance. The results of this research hypothesis obtained a coefficient value of 0.617892 and a significance of 0.1712. Because the significance value is $0.0993 > 0.05$, performance weakens the relationship between board size and firm value. Therefore, the seventh hypothesis that performance strengthens the relationship between board size and firm value can be **rejected**.

The results of this study indicate that performance cannot moderate the relationship between board size and firm value. A large board size will make it difficult for the independent board to carry out its role in communicating and coordinating cooperation with company performance. The result are investigation concur by Yan et al., (2021), showing that board's dimensions can reduce company performance. In-line research by Krisnando & Sakti, (2019) ROA cannot attenuate the relationship.

Hypothesis 9 Results and Discussion

Leverage, the initial control variable, has no impact on firm value, according to the findings in Table 4.7 above. As leverage value rises, corporate value falls. As a result, a business has to grow its profits or corporate profits because profitability is a consideration for the number of loans to be made. These results support research conducted by (Khotimah, 2019) and (Hendraliany, 2019), It is said that profitability improves how leverage and corporate value are related.

Based upon Table 12 findings, which demonstrate how firm size affects firm value, the

second control variable is firm size. The correlation between business size and firm value, however, is weakened by profitability. It shows that any profitability increase does not guarantee a firm size or value increase. Earnings management actions that make profits look large are a reason for investors to not only look at profitability ratios as a foundation for buying shares. Research of Hendraliany, (2019) is supported by these findings, which show that profitability diminishes the link between business size and firm value.

Conclusions and Implications

Conclusions

Based on the results and discussion of the research previously described, it can be concluded that:

1. Green accounting has no effect on firm value. This indicates that the presence or absence of green accounting in the company's annual report will not affect the company's value.
2. CSR has an effect on firm value. The amount of CSR disclosure increases firm value. On the other hand, firm value will decrease when CSR disclosure increases.
3. Institutional ownership has no impact on firm value. This means that no matter how large institutional ownership is, firm value will not increase.
4. Board size has no effect on firm value. This shows that board size has no impact on firm value.
5. Performance can moderate the effect of green accounting on firm value. These results indicate that performance strengthens the relationship between green accounting and firm value. Therefore, the greater the company's performance, the better the green accounting in the company's financial statements. The relationship between green accounting and firm value is stronger when the company's performance is high.
6. Performance can moderate the effect of CSR on firm value. These results indicate that performance strengthens the relationship between CSR and firm value. Therefore, the greater the company's performance, the more CSR disclosures will be made by the company. Moreover, the high level of probability can illustrate that the company is able to invest its capital in the company making high stock prices can increase company value.
7. Performance cannot moderate the effect of institutional ownership on firm value. These results provide that increasing or decreasing institutional ownership will not affect firm value. Therefore, institutional ownership has an important role in a company as a source of corporate capital, but this is not enough to provide added value to the company.
8. Performance cannot moderate the effect of board size on firm value. The correlation between board size and firm value will not be affected by high business performance.

Limitation

This study incorporates restrictions that future research should take into account to generate more accurate results. These are the study's limitation:

1. The lack of effect of green accounting on firm value is possible because the proxies used still cannot represent the actual proxy of green accounting.
2. Since not all manufacturing businesses produce sustainability reports as a source of CSR disclosure, the corporation is the exclusive source of CSR disclosure of annual report.

Recommendation

Suggestions that can be made in this study are:

1. Further research is expected to be able to add periods and add company samples.
2. The proxy used to calculate green accounting is not only on environmental costs. Other proxies to measure green accounting can be used as further research studies.
3. Companies should increasingly realize the importance of CSR disclosure in the company's annual report. The company should have a separate report that discusses in detail and entirely social, economic, and environmental disclosures, namely the sustainability report. At the same time as this research was conducted, not all companies published sustainability reports.

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