

The Effect of Age Diversity on Firm Value with Sustainability Reporting Disclosure as Intervening Variable

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Keywords : Age of the Board of Commissioners, Firm Value, Sustainability Reporting Disclosure.

Abstract: This study aims to determine the influence of the Age of the Board of Commissioners on Firm Value with Sustainability Reporting Disclosure as an intervening variable in manufacturing companies in the mining sector and chemical base materials listed on the Indonesia Stock Exchange in 2018-2022.

The independent variable in this study is the Age of the Board of Commissioners. The dependent variable in this study is Firm Value which is proxied by Tobin's Q. The intervening variable in this study is Sustainability Reporting Disclosure which is proxied by the economy, environment and social. The research sample amounted to 26 companies engaged in the manufacturing sector with the observation year 2018-2022. The data analysis method used path analysis with SPSS 25 software.

The results of the study show that the results of the direct influence test show that 1) The age of the Board of Commissioners has no effect and is not significant on the Firm Value 2) The age of the Board of Commissioners has no effect and is not significant on Sustainability Reporting Disclosure 3) Sustainability Reporting Disclosure has an effect and is significant on Firm Value 4) The age of the Board of Commissioners has no effect and is not significant on Firm Value with Sustainability Reporting Disclosure as an intervening.

Introduction

Company value is investors' perception of the Company's success rate as linked to the stock price. High stock prices will also make the Company's Value high (Abbas & Frihatni, 2023). Increasing company value can be achieved if decision-making between investors and management in maximizing capital is well established (Aslihatin & Suwandi, 2022). The assessment of the Company's activities is outlined in the *Sustainability Report*. *Sustainability Report* refers to guidelines developed by the *Global Reporting Initiative* (Rahma & Aldi, 2020). The disclosure of the *Sustainability Report* can be measured by comparing the number of *Sustainability Report* disclosures issued by the Company with the number of indicators contained in the GRI 2016 standards and the GRI 2021 standards. In this study, two standards were used, namely the 2016 GRI standards, as many as 136 indicators for the 2018-2021 research, and the 2021 GRI standards, as many as 117 indicators for the 2022 research. The *Global Reporting Initiative* (GRI) is a party that focuses on sustainability reporting to become a standard practice for entities responsible for performance and impact in the economic, environmental, and social fields (Traxler & Greiling, 2019).



Source: BPS 2023

Figure 1. Chart of Domestic Investment Realization by Economic Sector (23 Sectors) (US\$ Million)

Based on the graph above, there has been a significant increase in the amount of capital market investment, especially from 2021 to 2022, which has experienced an increase in the number of capital market investments by 23% or as much as 5,541.6 for the chemical industry, and as much as 145% or as much as 37,004.5 for the mining industry. This increasing investment is related to the need for relevant information that investors can consider when making investment decisions.

In the *Diversity Board*, in addition to *gender* and educational background, there is the Age of the Board of commissioners. The Age of the Board of commissioners is related to decision-making in the Company. The young Board of commissioners tends to have newer ideas (Van Ness & Kang, 2010), which can bring strategic changes to the Company (Darmadi, 2011). They can also be more active in supervising and more concerned about the problems faced by the Company, including CSR issues (Sondang Damanik & Dewayanto, 2021). With a

young Board of Commissioners who are more productive, productivity can create synergy (Setiawan et al., 2023). Age is selected as an independent variable because the Age of the Board of commissioners affects the quality of financial statements and the Value of the Company. The older the Age, the more ethical and conservative a person will be and tend to avoid accounting fraud (Maulia, 2014).

This study selected samples from companies in the mining basic materials and chemical sectors. According to Putra et al. (2017), the mining sector has more influence on the surrounding environment due to the activities carried out by the Company. It fulfills all aspects of the theme of *Sustainability Report Disclosure*. Besides that, the mining sector in Indonesia has prospects in terms of natural resources in the form of precious metals, coal, and others are very abundant, so this can attract investors to invest their capital, which can later increase the Company's profits and indirectly affect the Company's Value.

Identify the problem

Based on the background described above, the author identifies the following research problems: Research related to *Sustainability report disclosure* as *intervening* in the relationship between *Board Diversity of Commissioners* and *Firm Value* has not been widely done with research samples on mining companies and chemical base materials that are relatively difficult to find, causing its problems. So, the author is interested in researching this phenomenon. This research focuses on the Age of the Board of Commissioners and the three elements of *Sustainability Report Disclosure*, namely economic, social, and environmental sustainability performance. Therefore, this study aims to analyze and provide empirical evidence on whether *Sustainability Report Disclosure* can mediate the relationship between *Board Diversity* and *Firm Value* in Mining Companies and Chemical Base Materials in 2018-2022.

Research Questions

Based on the background described above, the questions in this study are: (1) Does the Age of the Board of Commissioners affect *Firm Value*? (2) Does the Age of the Board of Commissioners affect *Sustainability Reporting Disclosure*? (3) Does *Sustainability Reporting Disclosure* positively affect *Firm Value*? (4) Does *Sustainability Reporting Disclosure* mediate the relationship between the Board of Commissioners' Age and *Firm Value*?

Research Objectives

In connection with the research title above, the objectives are: (1) To test and analyze the influence of the Age of the Board of Commissioners on *Firm Value*. (2) Testing and analyzing the influence of the Age of the Board of Commissioners on *Sustainability Reporting Disclosure* (3) Testing and analyzing *the Sustainability Reporting Disclosure* mediating the relationship between the Age of the Board of Commissioners and *Firm Value*. (4) Testing and analyzing *Sustainability Reporting Disclosure* mediates the relationship between the Board of Commissioners' Experience and *Firm Value*.

Theoretical Study

Board Diversity is the concept of carrying out corporate social responsibility where the Company's obligation is not only limited to maximizing profits and the interests of shareholders but must also pay attention to the community, customers, and suppliers as part of the Company's operations (Aprilya & Kesaulya, 2023). The Board of Commissioners is part of the industry that carries out supervisory duties in general and certain matters based on the articles of association. The Board of Commissioners also advises and advises the Board of Directors based on Law Number 40 of 2007 concerning Limited Liability Companies. The Rules of Conduct of the Board of Commissioners contain the duties, authorities, and obligations of the Board of Commissioners, the supporting organs of the Board of Commissioners, and the Board of Commissioners' meeting. The division of duties of the Board of Commissioners is regulated in the Decree of the Board of Commissioners No.KEP-03/DKDR/VIII/2018 dated August 8, 2018. However, as is known, the Board of Commissioners has different backgrounds from each other, such as *gender*, Age, and education level (Ramadhani & Pranoto, 2023).

In the behavioral literature, age differences impact differences in leadership type, risk preference, and tolerance for aggressiveness (Hernawati & Sari, 2022). The age grouping of the Board of Commissioners can be divided into three groups: adulthood, early adult development (18-40th), intermediate adult (40-60th), and late adult (> 60th). Intermediate adult development has two parts: early intermediate (40-50th) and advanced intermediate (50-60th). Until the development of early and early adulthood, the age range of 50 years and below is included in the category of the Board of Commissioners of Young Age, while for the development of advanced and late adulthood has an age range over 50 years in the category of the Board of Commissioners of old Age (Sondang Damanik & Dewayanto, 2021). Older managers significantly impact performance, richer experience, and practice accumulated in skill-based competencies (Reed and Defillippi (1990). According to Mudrack's (1989) research, Peterson et al. (2001), and Sundaram and Yermack (2007), individuals will become more conservative and more ethical with Age (Maulia & Januarti, 2014).

Dong et al. (2017) argue that *Sustainability Reporting*, according to *the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (G4)*, is defined as a process that assists companies in setting goals, measuring performance, and managing changes toward a sustainable global economy that incorporates *long-term profitability* with social responsibility and environmental care.

According to Noerirawan (2012), company value is a condition that has been achieved by a company as an illustration of public trust in the Company after going through a process of activities for several years, namely since the Company was established until now. In simple terms, Tobin's Q is a performance measure that compares two valuations of the same asset. Tobin's Q is the ratio of the market value of a company's assets as measured by the market value of the number of shares outstanding and debt (*enterprise value*) to *the replacement cost* of the Company's assets (Hadyarti & Mohsin, 2019).

Research Hypothesis

Research Hypothesis According to Sugiyono (2009), a hypothesis is a temporary answer to the formulation of a research problem, where the formulation of a research problem has been stated as a question. It is considered temporary because the answers given are only based on theory. Hypotheses are formulated based on a frame of mind that provides a temporary answer to the formulated problem. Research that formulates a hypothesis is research that uses a quantitative approach.

Age of the Board of Commissioners on Firm Value

The grouping of the Board of Commissioners based on their Age can be seen from the young and old age groups. According to Nugroho et al. (2020), there are stages of development in adulthood, namely early adult development (18-40 years), intermediate adulthood (40-60 years), and late adulthood (over 60 years). Intermediate adult development is divided into two parts: early intermediate (40-50 years) and advanced intermediate (50-60 years), so in the development of early and early adulthood, which has an age range of 50 years and below is the category of the Board of Commissioners of young Age, while for the development of advanced and late adults who have an age range over 50 years is the category of the Board of directors of old Age. From this description, the following hypotheses can be formulated:

H1: The Age of the Board of Commissioners has a positive effect on *Firm Value*

Age of the Board of Commissioners on Sustainability Reporting Disclosure

Herrmann & Datta (2005) state that a person's Age can be considered a guarantee in terms of experience and risk-taking methods. Hambrick & Mason (1984) revealed that young managers tend to implement risky strategies, but there is a possibility of faster improvement than in other industries where managers are older. Older managers tend to avoid risk (Barker & Mueller, 2002). Young managers, on average, are more open and able to process new ideas, are less receptive to power vacancies, and like challenges (Cheng et al., 2010). The hypotheses that can be concluded are:

H2: The Age of the Board of Commissioners positively impacts *the Sustainability Reporting Department*.

Sustainability Reporting Disclosure on Firm Value

Company value is defined as market value. Because company value can maximize shareholders' prosperity or profits (Yuliusman & Kusuma, 2020). The Value of a company is seen by how far investors respond to the Company's shares. Investors will choose companies that are not only profit-oriented but also carry social and environmental responsibility for sustainable development. Companies play a role in the implementation of good corporate governance with the existence of economic, social, and ecological responsibility by

companies (Astuti & Juwenah, 2017). Based on the description made, it is formulated as follows:

H3: *Sustainability Reporting Disclosure* has a positive effect on *Firm Value*

The Age of the Board of Commissioners Affects Firm Value with Sustainability Report Disclosure as an Intervening

Kim & Lim's (2010) research found that the diversity of Age and academic majors from independent commissioners significantly positively affected the Company's Value. In an increasingly complex business environment, retaining senior individuals whose skills are outdated and require further development takes younger individuals to keep pace with seniors who are less creative, less interested in new technologies, and less flexible. Individuals with a younger age often look more creative and give companies new energy and innovative insights (Setiawan et al., 2023). This, it is hoped that *the Sustainability Report* can mediate the relationship between the Age of the Board of Commissioners and the Company's Value. The hypotheses expressed in this study are:

H4 = The Age of the Board of Commissioners affects the *Firm's Value* through *Sustainability Report Disclosure*.

Research Model

Here is a chart of the research framework, which can be explained to improve the understanding of the concepts used as follows:

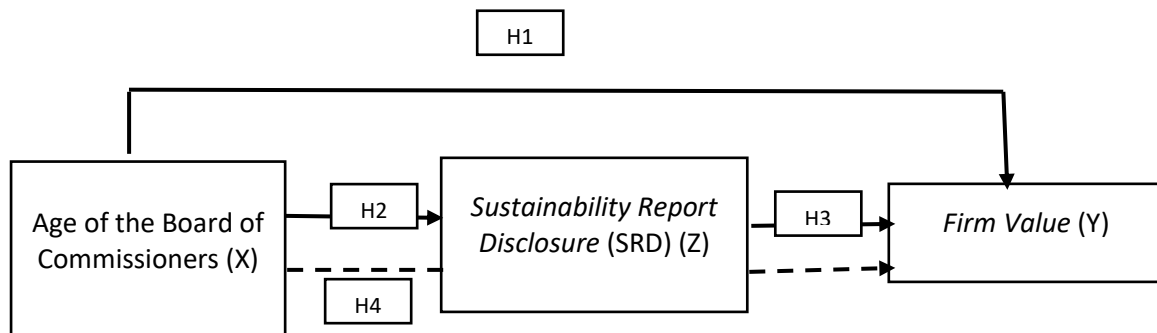


Figure 2. Research Model

Based on these studies, this study tries to identify the relationship between *independent* and *dependent* variables through *intervening variables*. Independent variables consist of *board diversity of commissioners* as measured by the Age of the Board; *firm Value* is measured by the *intervening variable*, namely *sustainability report disclosure* proxied with GRI Standards (2016) for *dependent* variables, namely the company value measured by Tobin's Q in companies in the mining sector and the basic materials and chemical industry sectors listed on the Indonesia Stock Exchange for the 2018-2022 period.

Research Methods

Research methods are scientific ways to obtain *flabby* data to be found, developed, and proven, as well as solve and anticipate problems in the business field. The population in this study is companies in the mining sector and the basic and chemical industry sectors listed on the Indonesia Stock Exchange (IDX) for the 2018-2022 period. This study uses and selects companies in the mining sector and basic and chemical industries. The obligation of the Company to submit financial statements to external parties and the obligation to carry out social and environmental responsibility (CSR) under the Law are also used and selected in this study no 40 of 2007.

Data and Data Sources

Data is a raw fact about an object that can reduce uncertainty about a situation and event. The data used in this study are annual financial statements, annual reports, and *Sustainability Reports* of companies in the mining sector and the basic and chemical industry sectors listed on the Indonesia Stock Exchange (IDX) for the 2018-2022 period in the form of *annual reports*. The type of data used in this study is *secondary* data. *Secondary data* is a source that does not directly provide data to data collectors, for example, through other people or documents. Secondary data sources are used to support information obtained from primary data sources, namely from literature materials, *literature*, previous research, books, and financial reports. In this study, the author uses *secondary* data, namely annual report data for companies, mining sector companies, and basic industry and chemical sectors sourced from the Indonesia Stock Exchange.

Data Collection Techniques

Data collection techniques are a method that can be used by research for data collection. Data collection is one of the most critical stages in research. The data collection techniques in this study are as follows: (1) *Field Research*, the data and information in this study using secondary data, where the data is obtained from financial statements, annual reports, and *sustainability reports* taken from the Indonesia Stock Exchange (IDX) website, namely www.idx.co.id. (2) *Library Research*, data, and other formulations related to this research are sourced from several books and journals. In addition, the author also obtained several data sources from references to previous research.

Procedural Analysis Data

1. Dependent Variables

Variable *Dependent* In this study, the Value of the Company is discussed. This study empirically examines the influence of *sustainability reporting disclosure* with the Value of the Company proxied with Tobin's Q. Tobin's Q can be calculated using the following formula (Nurhayati, 2019). Tobin's Q =
$$\frac{(EMV+D)}{(EBV+D)}$$

Description: Q: company value.

EMV : Equity Market Value (*Closing price* x number of shares outstanding).

D : book value of total debt.

EBV : book value of total assets

2. Independent Variables

The *dependent* variable in this study is the Age of the Board of Commissioners as measured by the Blau Index (García-Sánchez et al., 2014). The calculation of the Blau index sees the Age of members of the Board of Commissioners under 50 years old and over 50 years old grouped and included in the measurement. The research obtained age data on each member of the Board of Commissioners by looking at the profile of the date of birth of the board members published in the annual report and the Company's website. When using the Blau Index, when the index value is close to 1, it shows that the Age of the Board of Commissioners or the Board of Directors is increasingly universe. Still, when it is further away from 1, it indicates many different ages in a company's Board of Commissioners or the Board of Directors. In general, the Blau Index can be searched with the formula, namely:

$$Bi = 1 - \sum Pi^2$$

Description:

Bi = Blau's Index

Pi2 = Proportion of the Age of the members of the Board of Commissioners that are absolutized

3. Classic Assumption Test

a. Normality Test

The data normality test was carried out to determine whether the data obtained from several research variables came from normal distributed data. The analysis used to test the normality and each variable in this study is the *Kolmogorov-Seminorv statistical test* by looking at the significance value with the following conditions: Significance (α) = 0.05 Significance value ≥ 0.05 , then H0 is accepted as Significance value < 0.05 , then H0 is rejected

b. Autocorrelation Test

Autocorrelation was performed to test whether there is a correlation in the linear regression model between the confounding error in period t and Period t-1 (previous). Autocorrelation arises because the sequential observations over time are related to each other. This problem occurs due to residual or disruptive errors that are not free based on one observation to another. A good regression model is free of autocorrelation. It can be seen based on the Value of D-W (Durbin Watson) to find out whether there is an autocorrelation. Here are the rules to remember when making a decision: (1) If $Du < DW < 4 - Du$, then H_1 is rejected, which indicates no autocorrelation. (2) If $DW < DL$ or $DW > 4 - DL$, then H_1 is accepted, which indicates that autocorrelation occurs. (3) If $DL < DW < Du$ or $4 - Du < DW < 4 - DL$, it means that no conclusion can be drawn.

c. Multicollinearity Test

This test is carried out to find out if the variables are correlated with each other. It is said that multicollinearity occurs if there is a perfect or near-perfect linear correlation (relationship) between independent variables. A good regression model should not have multicollinearity. To test the existence of multicollinearity, several alternative methods can be chosen, namely comparing each determination coefficient (r^2) with the Value of the same determination (R^2) or observing the *Value of Tolerance* and the *Value of VIF (Variance Inflation Factory)* in the value regression model. The conditions are: (1) If the VIF value is < 10 and the *Tolerance* value is > 0.1 , then multicollinearity does not occur. (2) If the VIF value is > 10 and the *Tolerance* value is < 0.1 , multicollinearity occurs.

d. Heteroscedasticity Test

Heteroscedasticity means that the variance of the interference variable is not constant. This test was carried out to determine whether there is an unevenness of residual error changes in the regression model from one observation to another (Santoso et al., 2006). In other words, the test aims to see the square distance from the distribution points to the regression line. A good regression model will not experience heteroscedasticity. One way to detect heteroscedasticity is to look at the *scatter plot* with the following conditions: (1) If the Value of the count $<$ the Value of the table, then heteroscedasticity does not occur. (2) If the Value of $t_{cal} >$ the Value of the table, then heteroscedasticity occurs

4. Multiple Linear Regression Analysis

The analysis used in the data processing of this study is multiple *regression analysis*. Multiple regression analysis was performed to test whether the ratio interval measurement scale in linear equations significantly affected independent and dependent variables. The hypothesis test in this study is the characteristics of the Board of Commissioners towards *Firm Value* and *Sustainability Report* as intervening variables. The characteristics indicators of the Board of Commissioners consist of the Board of Commissioners (Age), *Firm Value*, and *Sustainability Report* (SR).

$$FV = \alpha + \beta_1 \cdot AGE + SRD + \varepsilon \dots\dots (1)$$

$$SRD = \alpha + \beta_1 \cdot AGE + \varepsilon \dots\dots\dots (2)$$

Information:

FV = Company Value

α = Constant Value

β_1 = Independent variable regression coefficient

AGE = Age of the Board of Commissioners

SRD = *Sustainability Report Disclosure*

ε = Error term,

which is the study's guessing error level (Kristina & Wiratmaja, 2018).

5. Hypothesis Testing

This test determines whether the independent variable, which consists of the Board of Commissioners (Age) and Sustainability Report Disclosure (SRD), is against the dependent variable, namely, the *Firm Value*.

a) Coefficient of Determination

The overall coefficient of determination (R^2) is also analyzed in multiple linear regression tests. R^2 is used to measure the best accuracy of numerous linear analyses. If R^2 is closer to one (1), then the model can be more robust in explaining the change of independent and dependent variables. Conversely, if R^2 is close to zero (0), the independent variable that can explain the dependent variable is weaker.

b) Simultaneous Test (Test F)

Hypothesis testing was carried out using the F test to significantly test the influence of independent variables consisting of the Board of Commissioners (Age) and *Sustainability Report Disclosure* (SRD) on the dependent variables (*Firm Value*) through the level of significance and hypothesis analysis. The significance level or α used in this study is 5%, and a P-value can be used to prove whether H_0 is accepted in this study.

- 1) If the P-value of $F > 0.05$ (α), then H_0 is accepted, and H_1 is rejected, which means that the dependent variable has no significant effect on the dependent variable at the same time.
- 2) If the P-value of $F < 0.05$ (α), then H_0 is rejected, and H_1 is accepted, which means that independent variables also have a significant effect on dependent variables (Santoso, 2004: 168).

c) Partial Test (t-test)

The purpose of the t-test is to test the regression coefficient significantly or the influence of each independent variable on the dependent variable. The t-test was conducted by looking at the significance level (α), where the one used in this study was 5%. To perform the t-test, it can be used by comparing the Value of P-

The Value of t is each variable independent of α (i.e. 5%).

- 1) If the P-value of t of each independent variable is > 0.05 (α), then $H_0: b_i \neq \text{zero}$ is accepted, and $H_1: b_i = 0$ is rejected, meaning that individually the independent variable X_1 has no significant effect on the dependent variable.
- 2) If the P-Value of t of each independent variable is < 0.05 (α), then $H_0: b_i \neq 0$ is rejected and $H_1: b_i = 0$ is accepted, meaning that individually, the independent variable X_1 has a significant effect on the dependent variable (Santoso, 2004:168).

d) Path Analysis

The path analysis method was used to test the influence of intervening variables. Ghazali (2016:237) explained that path analysis is an extension of multiple linear regression analysis to assess the causal relationship between variables that have been previously established based on theory, and path analysis can determine the pattern of relationships between three or more variables and cannot be used to confirm or refute the hypothesis of

imaginary causality. Mediation hypothesis testing can be done by conducting a Sobel or Sobel test. The Sobel test is carried out by testing the indirect influence between independent variables and dependent variables through intervening variables. The Sobel test is a mediation hypothesis test developed by Sobel in 1982 and is known as the Sobel test (*Sobel Test*). The effect of mediation can be seen from the multiplication of significant coefficients. The Sobel test has the following calculations:

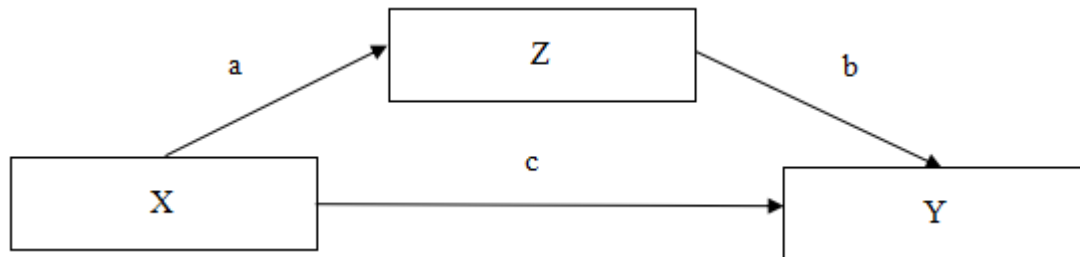


Figure 3. *Path Analysis*

$$Sat = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2 Sb^2}$$

Information:

Sat : the magnitude of the indirect influence error standard

a : the path of the independent variable (X) with the intervening variable (I)

b : the path of the intervening variable (I) with the bound variable (Y)

Sa : standard error coefficient a

Sb : standard error coefficient b

Ghozali (2016, p. 236) explained that the Sobel test is carried out by testing the indirect influence strength of the independent variable (X) to the bound variable (Y) through the intervening variable (Z) by multiplying the path X to Z (denoted by a) by the path Z to Y (denoted b) so that it can be denoted by (ab). From the multiplication result, the coefficient ab is (c-c'), where c is the influence of X on Y without controlling Z, and c' is the influence of X on Y after controlling Z. The significance of the indirect influence can be tested by calculating the value t of the coefficient ab with the following formula:

$$t = \frac{ab}{sab}$$

The local Value obtained will be compared with the table's t-value. If the Value of t_{calcul} > the Value of the tablet, then there is a mediating effect. Ghozali (2016: 243) describes an alternative approach to test the significance of mediation using *bootstrapping*. This non-parametric approach does not assume a form of variable distribution and can be applied to a small sample size.

Results and Discussion

Hypothesis Test Results

1. F Test

The F test is used to determine the effect of the independent variable on the bound variables in a study simultaneously or together. In the F test, this study will use a 5% or 0.05 significance value with the criteria: If the P value (Sig) is $> \alpha$, then H_0 is accepted. This means that independent variables have no significant influence on firm *Value*. If P value (Sig) $\leq \alpha$, then H_0 is rejected. This means that independent variables have a substantial impact on firm *Value*. The results of the F test in this study are as follows:

Table 1 F Test Results

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|-----|-------------|-------|-------|
| Type | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 6.992 | 5 | 1.398 | 7.300 | .000b |
| | Residual | 23.752 | 124 | .192 | | |
| | Total | 30.744 | 129 | | | |

a. Dependent Variable: Firm Value

b. Predictors: (Constant), SRD, Age

Source: Processed Secondary Data, 2024

H_0 : The Age of the Board of Commissioners and *the Sustainability Reporting Disclosure* simultaneously do not affect *the Firm Value*

H_1 : The Age of the Board of Commissioners and *Sustainability Reporting Disclosure* simultaneously have a significant effect on *Firm Value*

Based on the SPSS "Anova" output table above, it is known that the Significance value (Sig) is $0.000 < 0.05$, so it can be concluded that the hypothesis is accepted or, in other words, the Age of the Board of Commissioners (X1) and *the Sustainability Reporting Disclosure* (Z) simultaneously have a significant effect on *the Firm Value* (Y)

Table 2 Test Results F

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|-----|-------------|------|-------|
| Type | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | .269 | 4 | .067 | .948 | .439b |
| | Residual | 8.878 | 125 | .071 | | |
| | Total | 9.148 | 129 | | | |

a. Dependent Variable: SRD

b. Predictors: (Constant), Age

Source: Processed Secondary Data, 2024

H_0 : The Age of the Board of Commissioners simultaneously affects *Sustainability Reporting Disclosure*.

H_1 : The Age of the Board of Commissioners simultaneously has no significant effect on *Sustainability Reporting Disclosure*.

Based on the SPSS "Anova" output table above, it is known that the Significance value (Sig) is $0.439 > 0.05$, so it can be concluded that the hypothesis is accepted or, in other words,

the Age of the Board of Commissioners (X1) simultaneously does not have a significant effect on the Sustainability Reporting Disclosure (Z)

T Test Results

The T-test aims to determine how far each independent variable affects the bound variables in a study. When conducting a partial T-test, decision-making can be made by looking at the Sig value. This study uses a 5% or 0.05 significance value with the criteria: If the P value (Sig) > H0 is accepted. This means independent variables have no significant influence on the stock price if the P value (Sig) ≤ H0 is rejected. This means that independent variables have a substantial impact on stock prices.

The results of the T-test in this study are as follows:

Table 3 T-Test Results
Coefficients^a

| Type | | Unstandardized Coefficients B Std. Error | Standardized Coefficients Beta | t | Sig. |
|------|------------|--|--------------------------------------|--------|------|
| 1 | (Constant) | .548 .121 | | 4.519 | .000 |
| | Age | -.334 .209 | -.137 | -1.594 | .113 |
| | SRD | .671 .147 | .366 | 4.567 | .000 |

a. Dependent Variable: Firm Value

Source: Processed Secondary Data: 2024

Based on the table above, the influence of each independent variable on the bound variable is as follows:

Age Test of the Board of Commissioners (X) against Firm Value (Y)

H0: $\beta_1 = 0$ means that the Age of the Board of Commissioners does not have a positive effect on the Firm Value

H1: $\beta_1 > 0$ means that the Age of the Board of Commissioners has a significant positive effect on the Firm Value

The third hypothesis (H1) in this study is that the Age of the Board of Commissioners (X) does not have a positive effect on Firm Value (Y). Based on the SPSS "Coefficients" output table above, it is known that the Significance value (Sig) of the Board of Commissioners Age variable is 0.113. Because the Sig. Value is 0.113 > a probability of 0.05. It can be concluded that H1 is rejected and H0 is accepted, meaning there is no significant influence between the Age of the Board of Commissioners (X) and the Firm Value (Y).

H1: The Age of the Board of Commissioners does not have a significant effect on Firm Value

Age Test of the Board of Commissioners (X) against Sustainability Reporting Disclosure (Z).

H0: $\beta_2 = 0$ means that the Age of the Board of Commissioners does not positively affect Sustainability Reporting Disclosure.

H2: $\beta_2 > 0$ means that the Age of the Board of Commissioners significantly positively affects Sustainability Reporting Disclosure.

The seventh hypothesis (H2) in this study is that the Age of the Board of Commissioners (X) does not have a positive effect on *Sustainability Reporting Disclosure* (Z). Based on the SPSS output table “*Coefficients*” above, it is known that the Significance (Sig) value of the Board of Commissioners’ Age variable is 0.484. Because the Sig. Value is $0.484 > \alpha$ a probability of 0.05. It can be concluded that H2 is rejected and H0 is accepted, meaning there is no significant influence between the Age of the Board of Commissioners (X) and *Sustainability Reporting Disclosure* (Z).

H2: The Age of the Board of Commissioners has no significant effect on *Sustainability Reporting Disclosure*

Sustainability Reporting Disclosure (Z) Testing against Firm Value (Y)

H0: $\beta_3 = 0$ means that *Sustainability Reporting Disclosure* has no positive effect on *Firm Value*

H3: $\beta_3 > 0$ means that *Sustainability Reporting Disclosure* has a significant positive impact on *Firm Value*

The ninth hypothesis (H3) in this study is that *Sustainability Reporting Disclosure* (Z) has a positive effect on *Firm Value* (Y). Based on the SPSS output table “*Coefficients*” above, it is known that the Significance value (Sig) of the Board of Commissioners Experience variable is 0.000. Because the Sig. Value is $0.000 < \alpha$ a probability of 0.05, it can be concluded that H3 is accepted and H0 is rejected, which means that *Sustainability Reporting Disclosure* (Z) has a significant influence on *Firm Value* (Y).

H3: *Sustainability Reporting Disclosure* has a significant impact on *Firm Value*

Age Test of the Board of Commissioners (X) after the mediation variable of *Sustainability Reporting Disclosure* (Z) to *Firm Value* (Y).

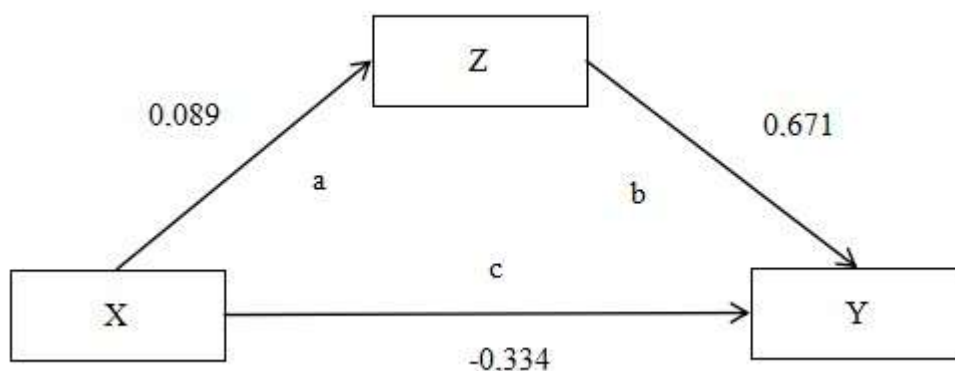


Figure 4.

The Mediation Effect of the Age of the Board of Commissioners on *Firm Value* with *Sustainability Reporting Disclosure* Mediation variables

The above model is formed from the regression results that create a *path analysis model with the Sustainability Reporting Disclosure variable* as the mediator. The following is the formula for the Sobel test.

Test:

$$S_{ab} = \sqrt{b^2 S_a^2 + a^2 S_b^2 + S_a^2 S_b^2}$$

Where:

a. : coefficient of the direct effect of the Age of the Board of Commissioners on *firm Value*

b. : coefficient of the direct impact of *Sustainability Reporting Disclosure* on *firm Value*

Sa: Standard error of coefficient a

Sb: Standard error of coefficient b

The results of the calculation are as follows:

$$S_{ab} = \sqrt{b^2 S_a^2 + a^2 S_b^2 + S_a^2 S_b^2}$$

$$S_{ab} = \sqrt{(0.6712 \times 0.1272)^2 + (0.0892 \times 0.1472)^2 + (0.1272 \times 0.1472)^2}$$

$$S_{ab} = \sqrt{0.450 \times 0.016 + (0.001 \times 0.022) + (0.016 \times 0.022)}$$

$$S_{ab} = \sqrt{0.007 + 0.000 + 0.001}$$

$$S_{ab} = \sqrt{0.008}$$

$$S_{ab} = 0.089$$

To test the significance of the indirect influence of the independent variable on the dependent variable, it is necessary to derive Z from the coefficient ab with the following formula:

$$Z = \frac{ab}{S_{ab}}$$

$$= \frac{0.089 \times 0.671}{0.089}$$

$$= 0.07$$

From the results of the Sobel test calculation above, a Z value of 0.07 was obtained because the Z value obtained was $0.07 < 1.96$ with a significance level of 5%, proving that there is no significant influence of the Age of the Board of Commissioners on *the firm Value* through *Sustainability Reporting Disclosure*. Based on the results of the Sobel test above, the results of the research hypothesis are as follows:

H4: The Age of the Board of Commissioners does not significantly affect *firm Value* through *Sustainability Reporting Disclosure*.

Conclusion

Based on the research results and discussions that have been carried out, it can be concluded that the Age of the Board of Commissioners does not affect *Firm Value*. This means that when the age diversity of the Board of Commissioners gets higher, it encourages a decrease in the Company's niali. The increasing age diversity causes this situation. There is a greater possibility of conflict between younger members of the Board of Commissioners

and more senior Board of Commissioners due to the lack of mutual understanding and understanding at work. The Company's reputation tends to decline (Gustiana et al., 2021).

The Age of the Board of Commissioners does not affect the *Sustainability Reporting Disclosure*. This means educational background has no effect because councils with educational backgrounds other than economics and business can also disclose sustainability reporting disclosure in detail to improve the Company's reputation (Damanik & Dewayanto, 2021).

Sustainability Reporting Disclosure Affects Firm Value. This means that sustainability reporting practices will help companies to minimize social/political costs, establish long-term relationships with relevant stakeholders, reduce the risk of environmental compliance and heavy labor, attract new talent and retain the best, build the Company's image and reputation, and expand the reach of the customer base and loyalty, which will lead to maximizing the Company's Value (Ermenc, Klemencic, & Rejc Buhovac, 2017).

The Age of the Board of Commissioners does not affect *Firm Value* after being mediated by *Sustainability Reporting Disclosure*. The diversity of the Age of the Board of Commissioners did not affect the disclosure of the Sustainability Reporting Disclosure, in which it was found that companies that carried out social responsibility had more young boards. This finding found that the Age of the Board of Commissioners after *the mediation of Sustainability Reporting Disclosure* did not affect *Firm Value* (Damanik & Dewayanto, 2021).

Recommendations

The recommendations that the author can convey are expected to be considered and input both for the Company and investors. Companies should increase their firm *Value* to experience growth from year to year, for example, by maximizing the Company's operations to generate significant profits, which will also be distributed to investors. In addition, companies can consider applying for debt by looking at the total equity owned by the Company that will be used as debt collateral so that the Company cannot afford to pay the debt because there is no equity to be used as debt collateral. Companies that experience an increase in *Firm Value* will attract more investors to invest in the Company to get a good image in the eyes of investors. This is reflected in the high *Firm Value* variable, which assures investors that the Company can work optimally with existing equity to obtain the maximum profit.

Investors should pay attention to the Firm Value and Sustainability Report Disclosure when deciding which Company will be their investment choice. *Firm Value* can assure investors that the Company can pay dividends to investors. *Firm Value* provides an overview of a good company's performance. Meanwhile, the Value of *Sustainability Report Disclosure* describes how much the Company cares about the environment around the Company. Of course, rational investors will choose companies with a *high Firm Value Sustainability Report Disclosure*.

Recommendations for academics: Adding other variables that can affect *Firm Value*, Increasing the research year period because thus the research is more renewable (*updated*), Adding the company sector that is the object of study, and not only focusing on companies that are classified as the manufacturing sector, Increasing the number of research samples because the addition of the number of samples can be a comparison of research results between a study with another research.

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