

# Financial Performance Mediates the Influence Between Good Corporate Governance and Firm Value

I Gde Andika Ariesta Kiradi<sup>1</sup>, Ni Gusti Putu Wirawati<sup>2</sup>

<sup>1</sup>Department of Accounting, Universitas Udayana, Indonesia

<sup>2</sup>Department of Accounting, Universitas Udayana, Indonesia

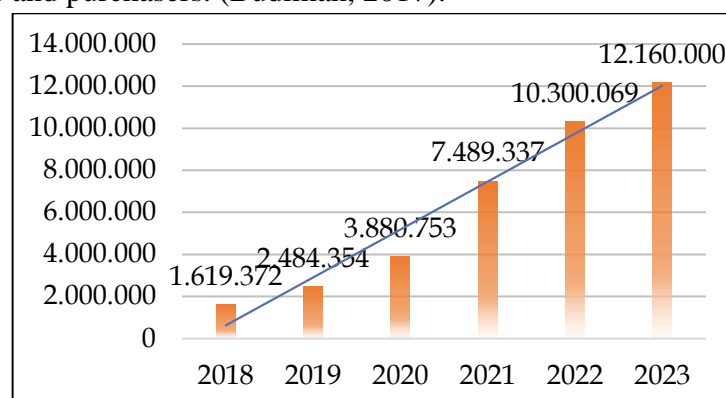
## Abstract

Using financial performance as a mediator, this study examines the relationship between Good Corporate Governance (GCG) and firm value for Energy Sector companies listed on the IDX between 2018 and 2022. The results show that GCG improves financial performance and business value when evaluated by the board of directors, independent commissioners, and institutional stock holding. Return on Equity (ROE), a measure of financial success, also acts as a mediator between GCG and company value. This research underscores the critical role of robust GCG practices in achieving superior financial performance and increased firm value. The findings are useful for policy makers, practitioners, and stakeholders in optimizing GCG practices in the energy sector.

**Keyword:** Good Corporate Governance; Firm Value; Financial Performance

## 1. Introduction

Enhancing the worth of the organisation is a key objective that is impacted by effective Corporate governance (GCG) and strong financial performance. (Prastuti & Budiasih, 2015). The capital market is a structured platform that facilitates the exchange of assets, such as stocks and bonds, issued by corporations, governments, and financial organisations, by connecting sellers and purchasers. (Budiman, 2017).



**Figure 1.** Number of Capital Market Investors in Indonesia

Source: Indonesia Stock Exchange (IDX)2024

With the increase in the number of investors in the last five years, share prices have become more liquid, as seen by the increase in the Jakarta Composite Index (JCI). The

Energy sector has experienced the largest growth in the last five years, with a share price increase of 185.44% by 2024.



**Figure 2.** Stock sector prices in Indonesia  
Source: Trading View, 2024

The surge in stock prices on the IDX has bolstered public interest in capital market investment, particularly in stocks. Investors must acquire a greater level of investment understanding to complement this rise. Inexperienced investors should focus on the business's annual report, which provides details on business entity governance and its influence on financial performance and company worth. Corporate governance (GCG) oversees the interactions of shareholders, management, and other stakeholders, with the objective of enhancing long-term business entity value (Nurulrahmatiah et al., 2020). GCG is assessed according to the composition of the Board of Directors, the presence of Independent Commissioners, and the level of Institutional Ownership. Financial performance information is crucial for investors as it provides insights into the overall well-being of the organization (Nurlia & Juwari, 2016). Financial statistics, such as Return on Equity (ROE), are employed to assess a company's financial performance and its ability to effectively handle its assets. The Return on Equity (ROE) metric indicates the capacity of a company's equity to generate profits (Rahmadani & Rahayu, 2017). The firm value is a crucial metric that reflects the effective management of resources and influences investor perceptions of the company's performance, often correlated with stock prices (Riadi, 2017). Price to Book Value (PBV) is a metric used to evaluate whether a company's shares are overvalued or undervalued (Muttaqin et al., 2019).

## 2. Literature Review

### 2.1 Agency Theory

Good Corporate Governance (GCG) has been studied for its effects on financial performance and firm value (Situmorang & Simanjuntak, 2019; Prastuti & Budiasih, 2015; Meianti et al., 2023). Given the conflicting findings on GCG's effects on financial performance and business value, this research will examine that effect via financial performance's moderating function. Agency Theory describes the interaction between agents

and principals (shareholders/owners) (Yanti, 2015), the dynamic between employers (principals) and assignees (agents) is governed to ensure the proper execution of tasks (Jensen & Meckling, 1976).

## **2.2 Signalling Theory**

Signalling theory serves as a complementary theory in this research, providing support for agency theory. Signalling Theory, introduced by Ross (1977) and Spence (1973), posits that business entity leaders who possess superior knowledge would communicate it to potential investors in order to boost stock prices. High-performing corporations utilise financial information as a means to transmit positive signals to the market. Herdirinandasari & Asyik (2016) state that signal theory elucidates how external parties might utilise information provided by a corporation to enhance their decision-making process. business entities and investors use financial statements to convey their future goals and expectations. When business entities release positive news, it sends a signal to investors, which can rise up perceptions and drive up stock prices. The sum asset turnover ratio, an efficiency measure, indicates how effectively a company generates revenue from its assets. This ratio is determined by dividing the sum sales by the sum value of the assets (Abdallah et al., 2022). Signalling theory elucidates the manner in which corporations employ information to convey messages to investors (Benyamin & Endri, 2019).

## **2.3 Good Corporate Governance**

The Organization for Economic Cooperation and Development (1999) provides a definition of GCG as a framework for guiding and overseeing firms. The implementation of checks and balances in GCG serves as a preventive measure against the misuse of business entity resources (Wahyuningsih & Rasmini, 2020).

## **2.4 Board of Directors**

Board of directors oversees company and creates rules and strategy. Stewardship, risk management, internal control, communication, and social responsibility are their main roles (KNKG, 2006). This board bears the responsibility for monitoring the organization and plays an essential role within it. An external board of directors provides an unbiased perspective, remaining unaffected by the internal management's interests (Ikhsan et al., 2021).

## **2.5 Independent Commissioner**

Independent commissioners are tasked with the recruitment, evaluation, and dismissal of senior executives as part of the board of commissioners. They play a crucial role in ensuring that these processes are conducted impartially and effectively (KNKG, 2006). The authors Herdirinandasari and Asyik (2019) assert that they guarantee autonomy in the process of making decisions and overseeing the operations of the organization.

## 2.6 Institutional Ownership

The percentage of shares held by non-bank financial entities is institutional stock ownership. These institutions have a vested interest in overseeing the corporation and maintaining effective governance (Widianingsih, 2018).

## 2.7 Return on Equity

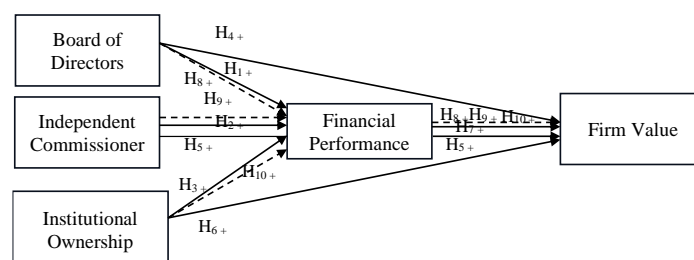
Return on equity (ROE) measures a company's profitability using shareholder equity. An increased return on equity (ROE) indicates efficient capital use to create large profits, making it a common profitability indicator (Petchsakulwong & Jansakul, 2018).

## 2.8 Firm Value

Firm value quantifies the extent to which a corporation has accomplished its objectives and delivered advantages to its owners. Firm value encompasses factors such as brand recognition, customer relationships, competitive advantage, and potential for future expansion (Marini & Marina, 2017).

## 2.9 Financial Performance Mediates the Influence Between Good Corporate Governance and Firm Value

Agency theory and signaling theory help explain financial performance as a vital intermediate between business entity governance and company value. Agency theory indicates that good commercial entity governance (GCG) supervises management-shareholder disputes. The board of directors' monitoring is thought to boost financial performance by fostering strategic decision-making. However, signaling theory stresses a company's financial performance as a key indication of its future and health to investors. Financial strength signals to the market that the firm is well-governed and has growth potential. Effective corporate entity governance may enhance financial performance, which increases firm value, linking board power to firm value. Based on the description and literature review, this research's variables may be arranged into a framework, as shown in the figure:



**Figure 3.** Research structure

Many things affect a company's value. Company financial performance and business entity governance (GCG) are examples. This study's hypotheses will be based on theory and earlier research.

H1: The board of directors positively influences the company's financial performance.

H2: Independent commissioners contribute positively to the company's financial performance.

H3: Institutional stocks holding has a positive impact on the company's financial performance.

H4: The board of directors positively affects firm value.

H5: Independent commissioners contribute positively to firm value.

H6: Institutional stocks holding positively influences firm value.

H7: Financial performance positively impacts firm value.

H8: Financial performance serves as a mediator between the board of directors and firm value.

H9: Financial performance acts as a mediator between independent commissioners and firm value.

H10: Financial performance mediates the influence of institutional stocks holding on firm value.

### **3. Material and Method**

The study used the Indonesia Stock Exchange (IDX) website, [www.idx.co.id](http://www.idx.co.id), and the official websites of all energy sector corporate organisations registered on the IDX from 2020 to 2022, as well as Google Finance at [www.google.com/finance/](http://www.google.com/finance/). Researchers study certain aims, features, or values of people, things, or activities to acquire data and form conclusions (Sugiyono, 2018: 32). Business entity value and its effects on the board of directors, independent commissioners, and institutional stock holdings are examined using financial performance as an intermediate variable. Researchers use study variables to explore and develop findings (Sugiyono, 2018: 68). This study divides factors into three groups: independent exogenous variables. Independent variables vary or affect the dependent variable (Sugiyono, 2018: 68). This study examines the impact of the Board of Directors (X1), Independent Commissioners (X2), and Institutional Ownership (X3). Endogenous (dependent) variables (Sugiyono, 2018: 68). This study examines Firm Value (Y). Mediators, or intervening variables, indirectly alter the independent-dependent connection. These factors are unmeasured (Sugiyono, 2018: 40). This study examines Return on Equity (ROE), symbol Z.

Firm value is a vital measure that evaluates a company's capability to achieve its goals and provide benefits to shareholders. It encompasses elements such as brand reputation, customer relations, competitive edge, and potential for future expansion (Marini & Marina, 2017). Price-to-Book Value (P/BV) is employed to assess whether a stock is overvalued or undervalued. P/BV is calculated using the following mathematical formula:

$$PBV = (\text{Market Share Price}) / (\text{Book Value per Share}) \dots\dots\dots (1)$$

The board of directors comprises persons who are empowered and appointed to oversee the firm, establish policies, and develop long-term or short-term objectives. They are accountable for internal control, risk management, social responsibility, and communication (KNKG, 2006). The number of board members serves as a metric (Syafitri et al., 2018).

Independent commissioners are individuals who serve on the board of commissioners and are not affiliated with the corporation in any way (Syafaatul, 2014). The calculation for independent commissioners is as follows:

$$\text{Independent Commissioner} = (\text{Number of Independent Commissioners}) / (\text{sum Commissioners}) \dots\dots\dots(2)$$

Institutional stocks holding denotes the degree of share stocks holding in a company held by institutions like banks and insurance firms. Such stocks holding empowers institutions to oversee and assess management performance and conduct to protect their investment interests (Syafaatul, 2014). The computation of institutional stocks holding can be derived through the following approach:

$$\text{Institutional Ownership} = (\text{Number of institutional shares}) / (\text{Number of shares outstanding}) \dots\dots\dots (3)$$

Return on Equity (ROE) is a financial measure that assesses a company's capacity to generate profits for its shareholders, reflecting how efficiently the company's capital produces net income (Riza, 2018). Return on equity (ROE) is determined using the following mathematical expression:

$$\text{ROE} = (\text{Net Income}) / (\text{sum Equity}) \dots\dots\dots (4)$$

Population is a property or attribute of the thing or topic under study. It underpins analysis and generalisations (Sugiyono, 2018: 136). This study included all 83 IDX-listed energy sector businesses. A subset of the population, the sample captures its traits and size (Sugiyono, 2018: 137). Based on established criteria, the study sample included only energy sector corporate organisations listed on the IDX (Indonesia Stock Exchange) from 2018 to 2022. Purposive sampling was used, which does not ensure equal selection opportunities for all population members (Sugiyono, 2018: 142). Purposive sampling comes from certain factors (Sugiyono, 2018: 144). The sampling requirements require the inclusion of consecutively registered Energy Sector businesses on the IDX from 2018 to 2022. 2) Energy sector corporations that release accessible yearly reports. 3) Regularly provide annual reports over the season from 2018 to 2022. 4) The research examines energy sector business entities that disclose business entity governance practices disclosed in their yearly reports. The sample size for this research is detailed in the table below.

**Tabel 1.** Research Sample Determination

Criteria	Number of business entities
All Energy Sector business entities listed on the IDX	83
Energy Sector business entities that are not listed consecutively on the IDX during the period 2018-2022	(26)
Energy Sector business entities that do not publish annual reports that can be accessed	(0)
business entities that do not publish annual reports regularly during the period 2018-2022	(8)
Energy Sector business entities that do not disclose GCG in their annual report	(0)
sum Energy Sector business entities that meet the research criteria	49
<b>Number of Observations during the 2018-2022 Period</b>	<b>245</b>

Non-participant observation methods were employed to gather data for this investigation. Non-participant observation is a way of collecting data that does not include direct participation in the activity of the object being observed (Sugiyono, 2018: 230). Data collection involves retrieving data from the official websites of the respective business entities, the Google Finance website, and the Indonesia Stock Exchange official website at [www.idx.co.id](http://www.idx.co.id). Data is collected, reviewed, and explained. Books, e-books, national and international periodicals, and reliable reports provide further data. The study uses panel data regression, which mixes cross-sectional and time series data. This method measures the same cross-sectional unit throughout time (Napitulu et al., 2021: 8). Quantitative data will be handled using EViews 12. Descriptive statistics analyse data by offering a thorough description without drawing broad inferences or generalisations (Sugiyono, 2018: 147).

Test for Multicollinearity: Multicollinearity refers to a scenario in which there is a correlation or strong association between two or more independent variables in a regression structure (Napitupulu et al., 2021: 67). The decision-making process for the pairwise correlation approach follows these conditions: 1) When the correlation coefficient of each independent variable is below 0.85, the null hypothesis ( $H_0$ ) is not rejected, indicating no multicollinearity issue. Conversely, if the correlation coefficient of any independent variable over 0.85, it necessitates rejecting the null hypothesis ( $H_0$ ) due to multicollinearity concerns.

The heteroscedasticity test examines whether there are variations in the residual variance across different observations within the regression structure. When the variance of the residuals is not constant, the predicted regression coefficients will lack efficiency and reliability. The justification for conducting the heteroscedasticity test is outlined as follows: 1) A p-value greater than 0.05 suggests no presence of heteroscedasticity. 2) A p-value under 0.05 indicates heteroscedasticity is present. 3) Estimating the Panel Data Regression structure.

Napitulu et al. (2021: 117) elucidate that panel data modeling can be accomplished using three distinct methodologies, which are expounded upon as follows: The Common Effect structure (CEM), also known as Pooled Least Squares (PLS), Panel data uses Ordinary Least Squares (OLS) or least squares estimation to combine time series with cross-sectional data.

Thus, this structure ignores temporal and individual aspects, assuming firm data behaves consistently across time.

The Fixed Effect structure (FEM) considers the potential presence of omitted factors that could affect the intercept of the time series or cross section. This structure posits that the features of each individual vary throughout different time periods, as indicated by the intercept value in the estimate structure for each individual (Savitri et al., 2021: 96). The structure employs a dummy variable technique to account for variations in intercepts among organizations, so it is referred to as the Least Squares Dummy Variable (LSDV) structure (Napitulu et al., 2021: 117).

Random Effect structure (REM): The dummy variables used in the FEM will result in fewer degrees of freedom which may reduce the parameters. This problem can be overcome by using a random effect structure. REM, alternatively referred to as the Error Component structure (ECM) or the Generalized Least Squares (GLS) technique, is capable of estimating panel data by incorporating disturbance variables that may exhibit interconnections over time and across individuals, thereby accommodating differences in intercepts through the error terms specific to each company. This structure also assumes that in various periods of time, the characteristics of each individual are different, but these differences are reflected by the error of the structure (Savitri et al., 2021: 96). REM enhances least square process efficiency by accounting for cross section and time series flaws. Heteroscedasticity is eliminated by this arrangement (Napitulu et al., 2021: 118).

#### Selection of Panel Data Regression Models

None of the three panel data regression models are entirely suitable for forecasting models. Therefore, it is essential to select the panel data regression structure that best meets the research objectives. Napitulu et al. (2021:118-120) identified three testing techniques for selecting the appropriate panel data regression structure. The Chow test, also known as the Restricted F-Test, is utilized to determine the maximum structure between CEM and FEM, as indicated by Savitri et al. (2021: 97).  $H_0$  posits the equality of intercepts, suggesting that CEM is the appropriate structure for panel data regression. Conversely,  $H_a$  suggests unequal intercepts, indicating that FEM is the correct structure for panel data regression (Napitulu et al., 2021: 118). The decision-making foundation is as follows: 1) If the P-value over the significance level ( $\alpha$ ) of 0.05, CEM is the preferred structure to employ. 2) If the P-value is under the significance level ( $\alpha$ ) of 0.05, the Finite Element Method (FEM) is the suitable structure to use.

Hausman's test determines the best Fixed Effects structure (FEM) or Random Effects structure (REM), according to Savitri et al. (2021: 98). The Hausman test statistic has as many df as independent variables and a Chi-Squares distribution. The efficiency of the Ordinary Least Squares (OLS) approach in the Common Effect method is assumed to be inefficient by the Hausman test, whereas the validity of the GLS and LSDV approaches in the Random Effect and Fixed Effect methods is assumed to be true (Napitulu et al., 2021: 119). The following is the foundation for making decisions: In cases when the P-value is greater than the significance threshold ( $\alpha$ ) of 0.05, the REM structure should be used. 2) The Fixed Effects Method (FEM) is the recommended architecture to use if the P-value is less than the significance threshold ( $\alpha$ ) of 0.05. When deciding between the Common Effects (CEM) and Random Effects (REM) structures, a statistical method called the Lagrange



Multiplier (LM) test (or simply the LM test) is used (Savitri et al., 2021: 97). Using a chi-square distribution with df equal to the number of independent variables, Breusch-Pagan's Random Effect significance test calculates the results. In panel data regression, the null hypothesis (H0) proposes the CEM structure as the best option, while the alternative hypothesis (Ha) proposes the REM structure (Napitulu et al., 2021: 119). Decisions are based on the following: 1) CEM is best if the LM statistical value is smaller than the chi-square statistical value at the important value and the significant P value is more than 0.05. 2) The random effects structure (REM) is recommended if the statistical language structure (LM) value is more than the chi-square statistic crucial value and the P value is less than 0.05. Panel data regression predicts a dependent variable while accounting for multiple independent variables. Multiple linear regression surpasses simple linear regression by adding independent variables. Multiple linear regression uses several independent variables to predict a dependent variable, as explained by Ghozali (2016). The following formula is used to compute multiple linear regression analysis :

$$Z = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots (5)$$

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 Z + \varepsilon \dots\dots\dots (6)$$

Description:

$\alpha$	= Constant
$\beta_1, \beta_2, \beta_3$	= Regression coefficient
$Y_2$	= Share Price
$X_1$	= Board of Directors
$X_2$	= Independent Commissioner
$X_3$	= Institutional Ownership
$Z$	= Return on Equity (ROE)
$\varepsilon$	= Error Term

The structure Feasibility Test (F Test) assesses the regression structure's research potential. F test significance indicates structural fit. If data matches the regression equation, a structure is appropriate. F test significance values are 5% (0.05). Why the structural Feasibility Test (F Test) is important: Statistical significance is proven by a F Test p-value below 0.05. A non-significant F-test p-value is more than 0.05. Ghozali (2014) suggests measuring the dependent variable's variance share using the coefficient of determination ( $R^2$ ). The coefficient of determination ranges from 0 to 1. High adjusted  $R^2$  values indicate that independent variables give sufficient information for regression prediction. A high  $R^2$  score indicates that independent factors effectively control the dependent variable's variability. A low  $R^2$  value indicates that independent factors only explain a tiny percentage of the variance in the dependent variable. The t-test, also known as the t-statistic, may test hypotheses or detect the partial effect of an independent variable on a dependent variable when other factors are accounted for (Ghozali, 2014: 98). A 5% significance criterion (0.05) is used for the t-test. Hypothesis testing using the t-test is based on: 1) The dependent and independent variables are significantly related if the t-test p-value is less than 0.05. 2) A p-value of t greater than 0.05 indicates a partial or insignificant effect of the independent or dependent variable on the dependent variable. Sobel (1982) introduced the Sobel test, a statistical tool for assessing mediation effects. Delta testing is used here. Mediation analysis models the independent variable-dependent variable

link as indirect, mediated by a third variable called the mediator. The Sobel Test utilizes the unstandardized coefficients and standard errors obtained from the path analysis calculation in Eviews 12 as input data. The obtained values are subsequently entered into the Sobel Test calculator and altered in the columns labeled a, b, Sa, and Sb (Osak, D. J., & Pasharibu, Y., 2020). In order to assess the indirect importance of the intervening variable, one can compute it using the subsequent formula:

$$S_{ab} = \sqrt{b^2 S_a^2 + a^2 S_b^2} \dots\dots\dots (7)$$

Description:

Sa = standard error of coefficient a

Sb = standard error of coefficient b

Sab = magnitude of indirect standard error

a = path X1, X2, and X3 to Z

b = path Z to Y

ab = path X1, X2, and X3 to Z (a) with path Z to Y (b)

#### 4. Result

The aim of conducting descriptive analysis in this research is to present a current snapshot of the data. This section offers a concise summary of the descriptive analysis results pertaining to the variables under investigation: board of directors, independent commissioners, institutional stocks holding, financial performance, and business value. The findings from the descriptive analysis will be presented in a forthcoming table.

**Table 2.** Descriptive Statistics Results

	X1	X2	X3	Z	Y
<i>Mean</i>	4,257	0,427	1,005	0,031	458931,9
<i>Median</i>	4,000	0,400	0,746	0,083	9141,302
<i>Maximum</i>	11,000	1,000	86,520	9,490	23186123
<i>Minimum</i>	2,000	0,167	0,100	-21,378	-63253,90
<i>Std. Dev.</i>	1,802	0,110	5,492	1,588	2816688

The subsequent phase of data that has successfully undergone the selection procedure and fulfills the sample criteria will be subjected to classical assumption testing. If all Gauss Markov assumptions, including non-autocorrelation, are satisfied, the panel data regression approach will yield Best Linear Unbiased Estimation (BLUE) results. When conducting panel data regression, only the tests for multicollinearity and heteroscedasticity are necessary, while other assumption tests employed in the Ordinary Least Squares (OLS) approach are not required (Napitupulu et al., 2021: 120A test for multicollinearity is performed to detect correlations or significant relationships among multiple independent variables within a regression structure. (Napitupulu et al., 2021: 67). The utilization of the pairwise correlation method for detecting multicollinearity is advantageous as it allows

researchers to precisely identify the independent variables that exhibit a robust association. Here are the outcomes of the multicollinearity test.

**Table 3.** Multicollinearity Test Results Structure 1

	Z	X1	X2	X3
Z	1	0,311035	0,325569	0,397607
X1	0,311035	1	0,146253	0,390770
X2	0,325569	0,146253	1	0,390719
X3	0,397607	0,390770	0,390719	1

**Table 4.** Multicollinearity Test Results Structure 2

	Y	X1	X2	X3	Z
Y	1	0,497567	0,428828	0,745754	0,444154
X1	0,497567	1	0,146253	0,390770	0,311035
X2	0,428828	0,146253	1	0,390719	0,325569
X3	0,745754	0,390770	0,390719	1	0,397607
Z	0,444154	0,311035	0,325569	0,397607	1

Based on the table data, the independent variables examined in this research exhibit correlation values below 0.85, indicating the absence of multicollinearity issues.

The heteroscedasticity test, on the other hand, is a statistical procedure employed to assess whether there exists a notable discrepancy in the residual variances throughout the dataset within a linear regression structure. Heteroscedasticity refers to a situation in which there is unequal variance of errors across all observations of each independent variable in a regression structure. This is in contrast to homoscedasticity, which is a condition where the variance of errors is equal for all observations (Napitupulu et al., 2021: 66). Heteroscedasticity manifests in the data when the probability value is under 0.05 ( $<0.05$ ), and it is absent when the probability value is greater than or equal to 0.05 ( $\geq 0.05$ ). The following table presents the outcomes of the Heteroscedasticity tests performed in this research.

**Table 4.** Heteroscedasticity Test Results Structure 1

F-statistic	6.062449	Prob. F(3,241)	0.0605
Obs*R-squared	17.19181	Prob. Chi-Square(3)	0.0606
Scaled explained SS	22.71245	Prob. Chi-Square(3)	0.0600

**Table 5.** Heteroscedasticity Test Results Structure 2

F-statistic	7.230518	Prob. F(4,240)	0.0900
Obs*R-squared	26.34930	Prob. Chi-Square(4)	0.0900
Scaled explained SS	35.05417	Prob. Chi-Square(4)	0.0900

From the findings presented in Table 5 and Table 6, it is clear that the independent variables under investigation in this research have probability values of 0.0606 and 0.0900,

respectively, which exceed the threshold of 0.05. This suggests the absence of any heteroscedasticity issue. The research encompassed three methodologies for panel data analysis: the Common Effect structure (CEM), Fixed Effect structure (FEM), and Random Effect structure (REM). Panel data integrates information from both time series sources and cross-sectional. The initial step involves developing an estimation structure to ascertain the suitable structure to be utilized in the research. The structure that aligns most closely with the research objectives will be chosen from these three options. Three tests, including the Hausman Test, Langrange Multiplier (LM) Test, and F Test (Chow Test), are employed to choose a panel data regression structure (CEM, FEM, or REM) based on data characteristics (Napitupulu et al., 2021: 135). The table below presents an overview of the structure estimation test outcomes in this research.

**Table 7.** Summary of Research Model Test Results Structure 1

<b>Description</b>	<b>Chow Test</b>	<b>Hausman Test</b>	<b>LM Test</b>
<i>Cross-Section F</i>	0,2855		
<i>Cross-Section Random</i>		0,0750	
<i>Chi Square</i>			0,9473

**Table 8.** Summary of Research Model Test Results Structure 2

<b>Description</b>	<b>Chow Test</b>	<b>Hausman Test</b>	<b>LM Test</b>
<i>Cross-Section F</i>	0,0015		
<i>Cross-Section Random</i>		0,0600	
<i>Chi Square</i>			0,0176

B

ased on the results of the structure selection tests outlined in Table 7 and Table 8, Structure 1 is identified as the Common Effect structure, while Structure 2 is identified as the Random Effect structure. Panel data multiple linear regression is a statistical approach that analyzes the same entities over time, incorporating both cross-sectional and time series characteristics (Wooldridge, 2016). This analysis aims to evaluate how the board of directors, independent commissioners, and institutional stocks holding influence financial performance, specifically return on equity (ROE) within Structure 1. Furthermore, it examines how these variables, along with financial performance (ROE), impact company value, measured by price-to-book value (PBV). The regression coefficients are computed using EViews 12 software, with the results displayed in the table below.

**Table 9.** Panel Data Linear Regression Test Results Structure 1

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	-0.131115	0.068573	-1.912036	0.0571
X1	0.197384	0.065797	2.999883	0.0030
X2	0.209905	0.064076	3.275888	0.0012
X3	0.420803	0.113438	3.709546	0.0003
<i>R-Squared</i>		0.221361		
<i>F-Statistic</i>		22.83812		
<i>Prob(F-Statistic)</i>		0,0000		

**Table 10.** Panel Data Linear Regression Test Results Structure 2

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	-0.083817	0.028042	-2.989005	0.0031
X1	0.142420	0.027199	5.236238	0.0000
X2	0.088012	0.026579	3.311360	0.0011
X3	0.568625	0.047337	12.01237	0.0000
Z	0.062256	0.026144	2.381264	0.0180
<i>R-Squared</i>	0.637673			
<i>F-Statistic</i>	105.5962			
<i>Prob(F-Statistic)</i>	0,0000			

The provided table displays the outcomes of panel data regression analysis using the Common Effect structure (CEM) in structure 1 and the Random Effect structure (REM) in structure 2. It also includes the results of the coefficient of determination test, structure feasibility test, and t test. The research structure shows that the F-Count values for the independent commissioners, institutional stocks holding, and board of directors are 22.83812 and 105.5962, respectively, with a probability of 0.0000. This indicates that these factors are all concurrently relevant in influencing both financial performance (ROE) and company value (PBV). Structure 1: The coefficient of determination is 0.2213 (22.13%), suggesting that 22.13% of the variation in ROE can be attributed to the influence of the independent commissioners, institutional stocks holding, and board of directors. Structure 2: The coefficient of determination is 0.6376 (63.76%), suggesting that 63.76% of the variation in PBV can be attributed to independent commissioners, the board of directors, financial performance, and institutional stocks holding. Below is the regression equation.

$$\text{ROE} = -0,1311 + 0,1973 \cdot \text{DD} + 0,2099 \cdot \text{KID} + 0,4208 \cdot \text{KINS} \dots\dots\dots (8)$$

$$\text{PBV} = -0,0838 + 0,1424 \cdot \text{DD} + 0,0880 \cdot \text{KID} + 0,5686 \cdot \text{KINS} + 0,0622 \cdot \text{ROE} \dots\dots\dots (9)$$

The indirect effect of the board of directors, independent commissioners, and institutional stock ownership on firm value (PBV) is examined in this study via the lens of financial performance (ROE). To determine if this indirect association, which is mediated by financial success, is statistically significant, the Sobel test is used. At the 95% confidence level, financial performance is considered to mediate the relationship between the independent and dependent variables if the computed Z-value is more than 1.96. 1) The Board of Directors' effect on the value of the firm is amplified by economic performance. A Z score of 40.7703 is greater than 1.96, suggesting that financial performance mediates the relationship between the board of directors (X1) and firm value (Y), suggesting that the board of directors indirectly affects firm value. Financial performance (Z) mediates the relationship between independent commissioners (X2) and firm value (Y), with a Z value of 44.5820 above 1.96. This indicates that independent commissioners indirectly affect company value. Additionally, financial performance (Z) mediates the association between institutional stocks holding (X3) and company value (Y), suggesting that institutional stocks holding indirectly affects firm value. This is supported by a Z score of 30.775, which is greater than the crucial value of 1.96.

## 5. Discussion

Accordinging on the research findings and subsequent hypothesis testing, this research concludes as follows: The board of directors significantly enhances the financial performance

of energy sector firms registered on the IDX (Indonesia Stock Exchange) from 2018 to 2022. Independent commissioners also exert a significant positive influence on the financial performance of these firms during the same season. Similarly, institutional stocks holding demonstrates a noteworthy and beneficial effect on the financial performance of energy sector business entities registered on the IDX throughout the 2018-2022 timeframe.

## **6. Conclusion, Implication, and Recommendation**

The research implications are offered based on the results and discussion of the research.

### **1) Theoretical ramifications**

This discovery affects science theoretically. Board of Directors, Independent Commissioners, and Institutional Ownership affect PBV ratio in Indonesia Stock Exchange-listed energy sector companies. Financial Performance—ROE—modifies this connection, according to the research. Institutional Ownership, Board of Directors, Independent Commissioners, and Financial Performance raise Firm Value statistically. Statistical testing shows that Financial Performance mediates Institutional Ownership, Board of Directors, Independent Commissioners, and Company Value. This study provides data to support previous research. It stresses how Board of Directors, Independent Commissioners, and Institutional Ownership effect Firm Value, with Financial Performance mediating.

### **2) Real-world consequences**

This research's research findings can offer valuable insights for company management. It provides practical implications for evaluating and managing risks that can impact the company's value, including aspects like good business entity governance, financial performance, such as the Institutional Ownership, Board of Directors, Independent Commissioners, ROE, and Company Value. The evaluation material can be used by firm management to facilitate the development of business entity governance practices. This will aid in defining strategic actions for the company, taking into account the variables examined in this research. The findings of this research are anticipated to serve as a guide for business entity management in effectively implementing good governance practices to optimize financial performance outcomes, so attaining greater company value in compliance with relevant rules, and ultimately maximizing the firm's benefits. Furthermore, this research can offer valuable insights for investors and potential investors in selecting energy sector business entities by focusing on governance, financial performance, and company value.

A board of directors boosts the value of energy sector businesses listed on the IDX (Indonesia Stock Exchange) in 2018–2022. During the 2018–2022 season, independent commissioners positively affect the value of IDX (Indonesia Stock Exchange) energy sector businesses. Throughout 2018–2022, institutional stock holdings boost the value of IDX-listed energy sector businesses. Energy sector companies' IDX financial performance from 2018 to 2022 boosts their worth. The board of directors, independent commissioners, institutional stock holdings, and the value of energy sector business entities registered on the IDX during the 2018–2022 season are mediated by financial performance.

This research provides recommendations. firm management must prioritize effective business entity governance in order to enhance firm performance and value. Investors and potential investors, this research's findings can serve as a valuable tool in selecting energy sector businesses by taking into account business entity governance, financial performance, and company valuation. other research is anticipated to extend the duration of observation and incorporate other variables in order to broaden the reach of the research sample.

## 7. References

### Article Journal

[Abdallah, A., Afifa, M. A., Saleh, I. H., & Alsufy, F. \(2022\). Determinants of Market Stock Price: New Evidence from an Emerging Market. \*Information Sciences Letters\*, 11\(2\), 549–558. <https://doi.org/10.18576/isl/110223>.](https://doi.org/10.18576/isl/110223)

Budiman, Raymod. (2017). Investing Is Easy: Teknik Analisa Dan Strategi Investasi Saham Untuk Pemula. *Jakarta: Erlangga*.

Ghozali, I. (2014). Aplikasi Analisis Multivariete Dengan Program IBM SPSS. *Badan Penerbit Universitas Diponegoro*.

Ikhsan, A., Nurlaila, Suprasto, H. B., & Batubara, F. Y. (2021). Determinat of The Corporate Social Responsibility Disclosure in Indonesian Manufacturing business entities. *Jurnal Ilmiah Akuntansi dan Bisnis*, 16(1), 71-83.

Jensen, M. C., & Meckling, W. H. (1976). Theory Of The Firm : Managerial Behavior, Agency Costs, And Ownership Structure

Marini, Y., & Marina, N. (2017). Pengaruh Good Corporate Governance Terhadap Nilai Perusahaan. *Jurnal Humaniora: Jurnal Ilmu Sosial, Ekonomi Dan Hukum*, 1(1), 7-20.

Meianti, A., & Imsar, I. (2023). The Effect of Good Corporate Governance on Company Value with Financial Performance as a Moderation Variable (Case research of Insurance business entities registered on the Indonesia Stock Exchange). *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 6(3), 1605-1623.

Muttaqin, Z., Fitriyani, A., Ridho, T. K., & Nugraha, D. P. (2019). ANALISIS GOOD CORPORATE GOVERNANCE, LEVERAGE TERHADAP NILAI PERUSAHAAN DENGAN PROFITABILITAS SEBAGAI VARIABEL PEMODERASI. *Tirtayasa Ekonomika*, 14(2), 293. <https://doi.org/10.35448/jte.v14i2.6525>

Napitulu, R. B., Simanjuntak, T. P., Hutabarat, L., Damanik, H., Harianja, H., Sirait, R. T. M., & Tobing, C. E. R. L. (2021). *Penelitian Bisnis: Teknik dan Analisis Data dengan SPSS - STATA - EVIEWS* (1st ed.). Madenatera.

Nurlia, & Juwari. (2016). Pengaruh Return On Asset , Return On Equity , Earning Per Share Dan Current Ratio Terhadap Harga Saham Pada Perusahaan Sub Sektor Terdaftar Di Bursa. *Jurnal Geoekonomi*, 73– 90.

Nurulrahmatiah, N., Pratiwi, A., & Manajemen Sekolah Tinggi Ilmu Ekonomi Bima, P. (2020). Pengaruh Good Corporate Governance dan Kinerja Keuangan Terhadap Harga

- Saham Perusahaan Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2011-2018. *Coopetition: Jurnal Ilmiah Manajemen*.
- Osak, D. J., & Pasharibu, Y. (2020). Pengaruh Brand Ambassador Dan Tagline Terhadap Keputusan Pembelian Online Dengan Mediasi Brand Awareness. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 9(2020), 357-380.
- Petchsakulwong, P., & Jansakul, N. (2018). Board of directors and profitability ratio of Thai non-life insurers. *Kasetsart Journal of Social Sciences*, 39(1), 122–128. <https://doi.org/10.1016/j.kjss.2017.11.005>.
- Prastuti, N. K. K., & Budiasih, I. G. A. N. (2015). Pengaruh good business entity governance pada nilai perusahaan dengan moderasi business entity social responsibility. *E-Jurnal akuntansi universitas udayana*, 13(1), 114-129.
- Rahmadani, F. D., & Rahayu, S. M. (2017). Pengaruh Good Corporate Governance (Gcg), Profitabilitas Dan Leverage Terhadap Nilai Perusahaan (Studi Kasus Pada Perusahaan Perbankan Yang Terdaftar Pada Bei Periode 2013-2015). *Jurnal Administrasi Bisnis*, 52(1), 173–182.
- Riadi, Muchlisin (2017). Pengertian Nilai Perusahaan. [www.kajianpustaka.com](http://www.kajianpustaka.com).
- Riza, F. (2018). Pengaruh Corporate Governance , Likuiditas Dan Kinerja Keuangan Terhadap Nilai Pasar Perusahaan (Studi Empiris Emiten Yang Mendapat Gcg Award Iicd. *Jurnal Profita*, 11(1), 91–105.
- Savitri, C., Faddila, S. P., Irmawartini, Iswari, H., Anam, C., Syah, S., Mulyani, S. R., Sihombing, P. R., Kismawadi, E. R., Pujiyanto, A., Mulyati, A., Astuti, Y., Adinugroho, W. C., Imanuddin, R., Kristia, Nuraini, A., & Siregar, M. T. (2021). *Statistik Multivariat dalam Riset* (I. Ahmaddien, Ed.). Penerbit Widina Bhakti Persada Bandung. [www.penerbitwidina.com](http://www.penerbitwidina.com)
- Situmorang, C. V., & Simanjuntak, A. (2019). Pengaruh Good Corporate Governance Terhadap Kinerja Keuangan Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Akuntansi Dan Bisnis*, 5(02), 160–169. <https://doi.org/10.31289/Jab.V5i2.2694>.
- Sobel, Michael E. (1982). "Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models". *Sociological Methodology*. 13: 290–312. CiteSeerX 10.1.1.452.5935. doi:10.2307/270723. JSTOR 270723
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355–374. <https://doi.org/10.2307/1882010>.
- Sugiyono. (2018). Metode Penelitian Kuantitatif dan Kualitatif dan R&D. Alfabeta.
- Syafaatul L, Kurnia. (2014). Pengaruh Good Corporate Governance Terhadap Harga Saham. *Portal Garuda: Universitas Brawijaya*.
- Syafitri, T., Nuzula, N. F., & Nurlaily, F. (2018). Pengaruh Good Corporate Governance Terhadap Nilai Perusahaan (Studi Pada Perusahaan Industri Sub Sektor Logam Dan



- Sejenisnya Yang Terdaftar Di Bei Periode 2012-2016). *Jurnal Administrasi Bisnis*, 56(1), 118–126.
- Wahyuningsih, A., & Rasmini, N. K. (2020) CSR Disclosure on Earnings Management with the Presence of Women in the GCG Structure. *Jurnal Ilmiah Akuntansi dan Bisnis*, 15(2), 293-307.
- Widianingsih, D. (2018). Kepemilikan Manajerial, Kepemilikan Institusional, Komisaris Independen, serta Komite Audit pada Nilai Perusahaan dengan Pengungkapan CSR sebagai Variabel Moderating dan Firm Size sebagai Variabel Kontrol. *Jurnal Akuntansi Dan Pajak*, 19(1), 38. <https://doi.org/10.29040/jap.v19i1.196>.
- Wooldridge, J. M. (2016). Should instrumental variables be used as matching variables?. *Research in Economics*, 70(2), 232-237.
- Yanti. (2015). Pengaruh Corporate Social Responsibility Dan Environmental Performance Terhadap Kinerja Keuangan Bumn Dan Non Bumn Yang Terdaftar Di Bursa Efek Indonesia 2009-2012. *Jurnal Akuntansi*, Xix(02), 242–259.