THE EFFECT OF CORPORATE GOVERNANCE QUALITY, LEVERAGE AND OWNERSHIP STRUCTURE ON FIRM PERFORMANCE

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ABSTRACT

This research was done to collect empirical evidence concerning the effect of corporate governance quality or CGQ (Board Size & Board Independence), leverage (DER) and also ownership structure (OS) on firm performance (ROA) of financial sector companies listed on IDX or the Indonesia Stock Exchange for the 2021-2023 period. 153 data from 51 financial sector companies are valid sample data in this research. EViews 12 was used to process the data in this research. This research adopts a quantitative descriptive research approach with panel data regression to comprehensively investigate 51 financial sector companies listed on the Indonesia Stock Exchange (IDX) between 2021 and 2023. Applying non-probability purposive sampling, the study combines cross-sector and time-series data to comprehensively examine how various factors influence performance over time. The results showed that board size had a significant effect on firm performance, while board independence did not have a significant effect on firm performance. Leverage was shown to have a significant effect on firm performance. However, ownership structure did not show a significant effect on firm performance. These findings provide insight for company managers in improving the quality of corporate governance and leverage management to support better firm performance in the financial sector.

Keywords: *Corporate Governance Quality, Leverage, Ownership Structure, Firm Performance, Financial Sector*

1. INTRODUCTION

In the last few years, the Indonesian economy has suffered various challenges, such as the decline in the exchange rate, rising interest rates, and changes in fiscal policy. These conditions have a direct effect on company performance in various sectors, including the financial sector. As a sector that has unique characteristics, such as high dependence on risk management, capital structure, and compliance with regulations, the performance of companies in the financial sector is not only measured by profitability or income, but also by the ability to maintain financial stability, liquidity, and asset management efficiency. The performance of the financial sector plays a vital role in evaluating the success of a company's operations and its impact on overall economic stability. In regard to data from OJK or the Financial Services Authority and the Government of Indonesia, the financial sector, including banking and other institutions, contributes significantly to the upkeep of the local economy. For example, in 2021, the banking sector recorded positive credit growth despite facing various challenges from global economic conditions, which shows the sector's ability to maintain national economic stability [1].

Firm performance also reflects how well the company can adapt to external challenges and run operations efficiently. According to Ross et al. (2017), firm performance in the financial sector has a strategic role in supporting efficient capital allocation in the market and creating jobs [2]. On the other hand, good CGQ plays an main role in improving firm performance.

High quality corporate governance not only creates transparency and accountability, but also contributes to better decision-making and effective risk management. Research show that companies with good corporate governance practices tend to have better financial performance, as this reduces conflicts between shareholders and management, and increases investor confidence [3].

Leverage is a ratio that describes the comparison between total debt and capital of a company, which shows the company's ability to manage its debt obligations [4]. A high leverage ratio indicates that the company is more dependent on current debt, which can increase the burden of obligations. The higherr the leverage ratio, the greater the obligations that the companies must bear, which minimize its profitability [5]. This is due to the increase in interest costs that must be paid, which in turn reduces the net profit that can be received by shareholders. Therefore, careful management of leverage is very necessary so that firm performance is maintained, considering the negative impacts that can arise if the leverage ratio is not managed wisely.

The ownership structure of a company has a significant impact on firm performance, especially in the context of resource management and decision making. Concentrated ownership can provide incentives for shareholders to be more active in supervising management, it can thereby enhance the business's financial results. Conversely, too much managerial ownership can cause an entrenchment effect, where management focuses more on personal interests than on shareholder interests [6].

Seeing the importance of the role of CGQ, leverage, and ownership structure in determining firm performance, this research tries to assess the influence of these three components on firm performance in financial sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2021–2023. It is anticipated that this research will give companies valuable insight into strategy in increasing competitiveness and maintaining sustainable growth amidst global economic challenges.

Agency Theory
According to Ghozali (2020), to accomplish the interests of the owners, management must be responsible for optimizing the performance of company to achieve maximum profit. The task of management is to manage the company so that it can operate effectively and efficiently to achieve shareholder goals and make a profit. Management also needs to present clear information and pay attention to the leverage aspect, as well as ensure the CGQ and the company's ownership structure in order to maximize profitability [7].

Capital Structure Theory
According to Ghozali (2020) explains that decisions regarding a company's capital structure include the choice between equity and debt financing, which can affect the risks and returns received by shareholders. In this theory, the optimal capital structure is achieved when the company can balance the advantages of using debt, such as tax savings, with the potential risk of bankruptcy due to excessive debt burdens. The ideal capital structure is look forward to grow the value of the company and encourage better financial performance. The selection of the right capital structure will be related to how leverage (debt level) affects the performance of company in relation to the CGQ and the existing ownership structure. [7].

Ownership Structure Theory

According to Ghozali (2020), the theory of ownership structure refers to the way in which a company's share ownership is divided among shareholders, be they individuals, institutions, or groups. This ownership structure can affect the way decisions are made in the company, which in turn can affect the company's performance and value. Majority shareholders tend to have greater influence on company policy, while minority shareholders often have limited access to information and influence decisions. Therefore, an effective ownership structure can improve oversight and encourage better decisions in the company. A clear and transparent ownership structure will play an important role in optimizing firm performance through good management, which is also influenced by the CGQ and the level of leverage used [7].

The Effect of CGQ on Firm Performance

CGQ especially board size and board independence, contributes significantly to enhancing company performance. Research by Arora and Bodhanwala (2018) and Weli and Pambudi (2023) shows a positive relationship between the two, while Ajili and Bouri (2018) found insignificant results[8][9][10]. This research retests the relationship with the following hypotheses:

H_1: Board size has a significant effect on firm performance.

H_2: Board independence has a significant effect on firm performance.

The Effect of Leverage on Firm Performance

Leverage can have a positive impact if managed properly, as found by Fibriyanti, Syafik, and Laili (2022) [11]. However, according to Ernawati and Santoso (2021), leverage does not significantly affect firm performance when the debt burden is too high[12]. This research proposes the following hypothesis:

H_3: Leverage has no significant effect on firm performance.

The Effect of Ownership Structure on Firm Performance

Ownership structure affects firm performance through management supervision. Kao et al. (2019) found a positive effect, while Rasyid and Linda (2019) reported insignificant results due to ownership fragmentation[13][14]. Based on that, this analysis proposes the following hypothesis:

H_4: Ownership structure has a significant effect on firm performance.

Based on the framework described above, the following is the research model that will be applied in this research:
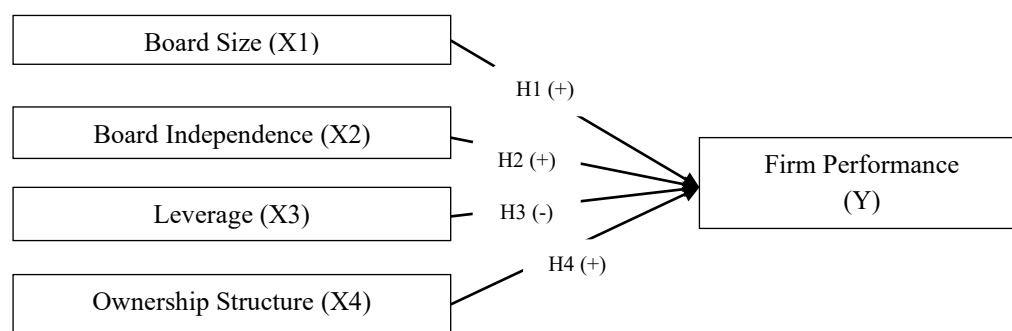

Figure 1. Conceptual Framework

2. RESEARCH METHOD

In this research applied a quantitative descriptive research method that aims to provide a systematic explanation of a phenomenon while understanding the characteristics of the research subject based on numerical data. This quantitative descriptive approach is applied to analyze the control of independent variables on dependent variables through the measurement process. Data testing is carried out using various techniques, such as classical assumption tests, multiple regression estimation tests, then continued with partial t tests, f tests and determination coefficient tests. The data analyzed are panel data from 51 financial sector companies listed on the IDX during the 2021-2023 period.

The sampling technique applied is non-probability sampling, namely non-random sample selection along with a purposive sampling method. The sample was chosen from the following criteria:
1) Financial sector companies that are consistently listed on the IDX during the 2021-2023 period.
2) Financial sector companis that present financial reports during the research period.
3) Financial sector companies that have data relevant to research needs.
4) Companies that did not experience delisting during the research period.

Based on these criteria, 51 companies were selected with a total of 153 data that were suitable for analysis. The focus of this research is firm performance as the dependent variable, with corporate governance quality, leverage, and ownership structure as independent variables. As illustrated the description of the research variables above, the instruments that can be used to measure each research variable can be determined, namely as follows:

Table 1. Measurement of variables

Variable	Size	Scale
Firm Performance (Y)	$ROA = \dfrac{Net\ Income}{Total\ Assets}$	Ratio
Corporate Governance Quality (X1 & X2)	SIZE = Number of board of directors in the company	Ratio
	$INDE = \dfrac{Number\ of\ independent\ board\ of\ commissioners}{Total\ board\ of\ commissioners}$	Ratio
Leverage (X3)	$(DER) = \dfrac{Total\ Liabilities}{Equity}$	Ratio
Ownership structure (X4)	$Institutional\ Ownership\ (IO) = \dfrac{Total\ Institutional\ Shares}{Total\ Shares\ Outstanding}$	Ratio

Data Analysis Methods
The use of panel data regression allows for the combination of cross-sector and time series data, which provides advantages in analyzing the dynamics of changes that transpire throughout a specific time period and between companies. Thus, panel data regression provides a more efficient approach to understanding the relationship between variables in a broader context.

The research data in this research were analyzed using E-Views 12 software, a powerful econometric tool for panel data analysis. The analysis process includes classical assumption tests, including assessments for normality test, heteroscedasticity test, multicollinearity test, and also autocorrelation test, to verify the validity and reliability of the regression model.

These tests help confirm that the assumptions underlying the regression analysis are met, ensuring unbiased results.

The study employs the Chow test, also Hausmant test, and Lagrange Multiplier test to identify best model for the panel data. These tests assist in selecting the model that best fits the data structure among the Common Effects Model, Fixed Effects Model, and Random Effects Model. The Hausman test aids in selecting between fixed and random effects models, while the Chow test contrasts pooled regression with fixed effects. The Lagrange Multiplier test determines if a pooled model or the random effects model is more suitable.

Because panel data regression approve for the analysis of both cross-sectional and time-series data, it is selected for the study of financial sector organizations from 2021 to 2023. This method takes into consideration the unique characteristics of each organization while enabling a thorough analysis of the ways in which different elements affect performance over time.

To assess how effectively the model explains changes in the dependent variable, the study also uses hypothesis testing techniques, such as the coefficient of determination (R^2), t-tests for individual significance, and F-tests for joint significance. This method contributes important insights into the dynamics of the financial sector while guaranteeing the legitimacy and robustness of the research findings.

3. RESULTS AND DISCUSSIONS
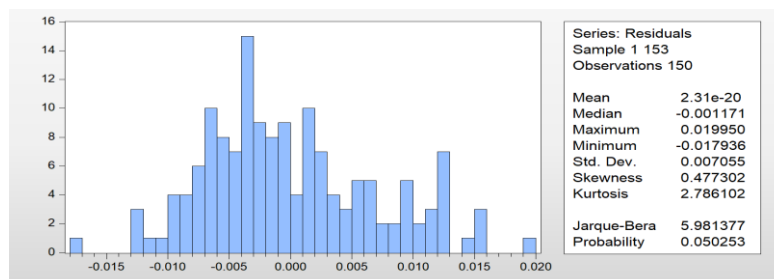
Data Analysis Assumptions

Figure 2. Normality Test
Source: Data processing by E-views 12

As indicated in Figure 2, the output of the normality test conducted using EViews, it can be inferred from the data applied in this research passed the normality test because the probability value (Prob) is greater than 0.05. This indicates that the data distribution is not significantly different from the normal distribution, which indicates that the data can be considered normally distributed and meets the normality assumption for further analysis. This normality test is important to ensure the validity of the research results, especially in regression analysis and other statistical techniques that require the assumption of a normal distribution.

Table 1. Heteroscedasticity Test
Source: Data processing by E-views 12

Heteroskedasticity Test: Breusch-Pagan-Godfrey
Null hypothesis: Homoskedasticity

F-statistic	1.719824	Prob. F(4,145)	0.1487
Obs*R-squared	6.794173	Prob. Chi-Square(4)	0.1472
Scaled explained SS	5.669782	Prob. Chi-Square(4)	0.2252

As shown in Table 1, the conclusion from the test using the Breusch-Pagan-Godfrey method based on the output of EViews 12 indicates that the probability values for all indicators are above 0.05. The prob value of F-statistic is 0.1487, Prob. Chi-Square (ObsR-squared) is 0.1472, and Prob. Chi-Square (Scaled explained SS) is 0.2252. This indicates that the model doesn't experience heteroscedasticity problems, so the homoscedasticity assumption is met. This heteroscedasticity test is conducted before the multicollinearity test to confirm the validity of the regression model used. With the fulfillment of the homoscedasticity assumption, the model can proceed to the next stage of analysis without worrying about non-constant error variances.

Table 2. Multicollinearity Test
Source: Data processing by E-views 12

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	1.46E-05	42.80127	NA
BS	5.14E-08	6.715713	1.245031
BI	2.93E-05	26.13669	1.100158
DER	5.73E-08	4.150881	1.271792
IO	1.23E-05	21.15278	1.062261

From Table 2, the finding of the multicollinearity test in the Variance Inflation Factors (VIF) table above were obtained using EViews 12 software. Based on these results, all independent variables have Centered VIF values below 10, namely: BS (1.245), BI (1.100), DER (1.271), and IO (1.062). These numbers show that the independent variables in the model do not have a strong linear relationship with one another. Thus, this model has passed the multicollinearity test according to the criteria (Centered VIF <10). These findings suggest that the regression model's independent variables can be utilized without the risk of distortion due to multicollinearity, so they are valid for further analysis.

Table 3. Autocorrelation Test
Source: Data processing by E-views 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.010626	0.003820	2.781276	0.0061
BS	0.001499	0.000227	6.612581	0.0000
BI	-0.006122	0.005414	-1.130646	0.2601
DER	-0.000674	0.000239	-2.818666	0.0055
IO	-0.005298	0.003502	-1.512633	0.1325

R-squared	0.236292	Mean dependent var	0.009602
Adjusted R-squared	0.215224	S.D. dependent var	0.008073
S.E. of regression	0.007152	Akaike info criterion	-7.010087
Sum squared resid	0.007417	Schwarz criterion	-6.909732
Log likelihood	530.7565	Hannan-Quinn criter.	-6.969316
F-statistic	11.21579	Durbin-Watson stat	1.224989
Prob(F-statistic)	0.000000		

According to Table 3, the results of test in this research applied the Durbin-Watson (DW) test, which produced a value of 1.224989. Based on the DW test criteria, the DW value between -2 and 2 shows that autocorrelation issues are not present in the regression model that was used. Therefore, the output of this test show that no autocorrelation exists in the regression model being tested. This analysis was carried out using EViews software, which provided results that support the validity of the regression model applied in this research.

Regression Model Estimation

Table 4. Chow Test
Source: Data processing by E-views 12

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.977042	(49,96)	0.0000
Cross-section Chi-square	166.281845	49	0.0000

As shown in Table 4 the outcome of the test, probability value for the cross-section is 0.000, which is less than or equal to 0.05, and the prob for the Chi-square cross section is also 0.000, which is less than or equal to 0.05. Therefore, it is possible to draw a conclusion that the regression model recommended by the Chow test is the Fixed Effect Model or also called FEM.

Table 5. Hausman Test
Source: Data processing by E-views 12

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.104301	4	0.2768

A results as presented in Table 5 of the Hausman test indicate that the more ideal model for this analysis is the FEM. With a Prob of 0.2768 since is more than 0.05, the null hypothesis that the REM is more suitable cannot be rejected by this test. However, these results indicate that the FEM is more appropriate to use to analyze the data, leading to the conclusion that individual or entity differences in this model are constant and relevant to analysis.

Table 6. LM Test
Source: Data processing by E-views 12

| | Test Hypothesis | | |
	Cross-section	Time	Both
Breusch-Pagan	34.05435 (0.0000)	0.228551 (0.6326)	34.28290 (0.0000)
Honda	5.835611 (0.0000)	0.478070 (0.3163)	4.464447 (0.0000)
King-Wu	5.835611 (0.0000)	0.478070 (0.3163)	1.624226 (0.0522)
Standardized Honda	6.275665 (0.0000)	1.045828 (0.1478)	-0.230484 (0.5911)
Standardized King-Wu	6.275665 (0.0000)	1.045828 (0.1478)	-0.416222 (0.6614)
Gourieroux, et al.	--	--	34.28290 (0.0000)

As indicated in Table 6, the Likelihood Ratio (LM) test results indicate that show that the REM is the better model for this analysis. With a Prob of 0.0000 that being smaller than 0.05, this test provides significant evidence againts the null hypothesis, which states that the Fixed Effects Model (FEM) is the most ideal. Therefore, these results lead to the selection of the random effects model (REM) as a more appropriate model to analyze the data, indicating that the differences between entities are random and can be explained by unobserved factors.

Partial Test (t-test)

Partial t-Test is a method in regression to analize the significant effect of one independent variable on a dependent variable by controlling for other variables. This test compares the t-count value with the t-table or uses the p-value. As long as the t-count is greater that t-table or p-value is smaller than 0.05, subsequently the independent variable is partially significant in influencing the dependent variable.

Table 7. Partial Test
Source: Data processing by E-views 12

Sample: 2021 2023
Periods included: 3
Cross-sections included: 50
Total panel (balanced) observations: 150
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.011582	0.004834	2.395990	0.0179
BS	0.001307	0.000309	4.229966	0.0000
BI	-0.007399	0.005713	-1.295103	0.1973
DER	-0.000553	0.000300	-1.843983	0.0672
IO	-0.004780	0.004831	-0.989589	0.3240

Referring to Table 7, the t-test findings clearly show that the independernt variables had a partial effect on the dependent variable. For the Board Size (X1) variable, the t-count value is 4.229966, its exceeds the t-table value of 1.975799, using a significance level of 0.0000 that

is below 0.05. This indicates that H_1 is accepted, confirming that board size has a significantly positive effect on firm performance.

On the other hand, the Board Independence (X1) variable shows a t-count value of 1.295103, that is less than the t-table value of 1.975799, and a significance level of 0.1973, being larger than 0.05. Consequently, H_2 is rejected, suggesting that board independence doesnot have a significant impact on firm performances.

For the Leverage (DER, X2) variable, the t-count value of 1.843983 is below the t-table value of 1.975799, with a significance level of 0.0672, which is greater than 0.05. These results lead to the rejection of H_3, indicating that leverage does not significantly affect firm performance.

Finally, the Ownership Structure (IO, X3) variable produces a t-count value of 0.989589, that is lower than the t-table value of 1.975799, and a significance level of 0.3240, exceeding the 0.05 threshold. As a result, H_4 is rejected, demonstrating that ownership structure does not significantly influence firm performance.

F Test

Based on Figure 9, the calculated F value is 4.818427 > F table that is 2.432788 and the sig. value is 0.001118 <0.05, meaning that Corporate governance quality, leverage, and ownership structure together have significant effect on firm performance.

Determination Coefficient Test (R^2)

Table 8. Determination Coefficient Test
Source: Data processing by E-views 12

Weighted Statistics			
R-squared	0.117327	Mean dependent var	0.004684
Adjusted R-squared	0.092977	S.D. dependent var	0.005322
S.E. of regression	0.005069	Sum squared resid	0.003725
F-statistic	4.818427	Durbin-Watson stat	1.954703
Prob(F-statistic)	0.001118		

From Table 8, the adjusted Rsquared value of 0.092977 implies that independent variabels such as Corporate Governance Quality, Leverage and Ownership structure have an influence of 9.3% on the dependent variable used, namely Firm Performance. Thus, it follows that the independent variables can be explained the dependent variable by 9.3%. Meanwhile, the remaining 90.7% can be clarify by other independent variables not used in this research.

4. CONCLUSIONS AND SUGGESTIONS

Considering the output of the research findings, it may be said that CGQ, as measured by board size and board independence, has differing impacts on firm performance. Board size demonstrates a positively and significant influence on firm performance, suggesting that a larger board can improve decision-making and result in better organizational outcomes. This indicates that having a diverse and potentially more resourceful board can be advantageous for firms. On the other hand, board independence does not show a significantly effect on firm performance. This suggests that the proportion of independent directors on the board does not

necessarily translate into better financial outcomes for company in the financial sector listed on IDX during the 2021 until 2023 period.

Leverage, representing the financial structure of a company, has a positive and significantly effect on firm performance. In this finding denotes that the strategic and optimal use of debt can enhance firm performance, potentially increasing returns for shareholders. It highlights that leverage, when managed effectively, can serve as a tool to improve profitability and value creation for companies in the financial sector listed on the IDX during the observed period.

Meanwhile, ownership structure doesn't have a significantly impact on firm performance. This point that whether ownership is concentrated in a few hands or dispersed among many stakeholders does not play a decisive role in shaping the financial performance of companies. The composition of ownership appears to have minimal impact on the financial sector company listed on the IDX during the 2021 to 2023 period, suggesting that other factors may have a more critical role in driving performance outcomes.

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