

# The Influence of Firm Size, Capital Structure, Total Assets Turnover Ratio and Liquidity on Financial Performance with Good Corporate Governance as a Moderation Variable in Food and Beverage Sub-Sector Manufacturing Companies Listed on the IDX 2016-2022

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## ABSTRACT

This research aims to determine the influence of company size, capital structure, total asset turnover ratio, and liquidity on financial performance with good corporate governance as a moderating variable in food and beverage sub-sector manufacturing companies listed on the BEI in 2016-2022.

This research was conducted based on information obtained on the Indonesian Stock Exchange. The sampling technique for this research uses a purposive sampling method. The population in this study were 47 food and beverage sub-sector manufacturing companies listed on the IDX in 2016-2022, and the sample obtained was 20 companies. The data types used are secondary data panel data regression data analysis techniques and moderate regression analysis (MRA) tests with the help of Eviews 10. This research shows that company size has a negative and significant effect on financial performance, capital structure has a negative and significant impact on financial performance, TATO has a positive and significant impact on financial performance, and liquidity has a negative and insignificant effect on financial performance. Good corporate governance can moderate the influence of company size on financial performance; GCG can moderate the impact of capital structure on financial performance; GCG can moderate the effect of TATO on financial performance; and GCG is

unable to moderate the influence of liquidity on financial performance.

**Keywords:** *company size (firm size), capital structure (DER), total asset turnover ratio, liquidity (CR), good corporate governance (proportion of independent commissioners), financial performance (ROA)*

## INTRODUCTION

Evaluating a company's financial performance is essential for improving its operations to experience better financial growth (Khuzaini et al., 2017). Intense competition in various companies encourages each company to have clear goals to survive in the long term. To survive and develop, company managers must be able to manage company resources well to produce optimal profits. One thing that companies must pay attention to is improving financial performance. The company's financial aspects have an essential role in evaluating the company's performance, as reflected in the financial reports. Financial reports, which include balance sheets, cash flow reports, and other expense reports, aim to provide information that can give an overview of the company's condition. (Vidiantoro & Soetopo, 2013) States that measuring financial performance includes calculating

financial ratios based on the company's financial reports published and audited by public accountants. Financial ratios are used to assess a company's financial health and performance, providing necessary information regarding the company's financial condition, health, and profitability (Van Horne in Santoso, 2021). Financial ratios are grouped into 5 groups of ratios, namely liquidity ratios, solvency ratios, activity ratios, profitability ratios, and investment ratios (Brigham & Houston, 2019).

The food and beverage sector are the most common and closely related to the broader community. The food and beverage industry are a sector that continues to grow and makes a significant contribution to society, mainly because the products produced are primary needs that are always needed by society, both in normal conditions and during crises. Therefore, in this research, the researcher chose to examine companies operating in the food and beverage sector as the object of study. In 2020, growth in the food and beverage industry experienced a decline. Based on data from the Central Statistics Agency (BPS, 15 September 2020), the reduction in food and beverage companies was substantial, namely 92.47%. The food and beverage industry experienced limited growth due to the decline in people's purchasing power. The performance of the food and beverage industry during the 2015-2019 period grew an average of 8.16%. However, throughout the fourth quarter of 2020, it decreased but grew positively at 1.58% (kemenperin.go.id). Even though it is still increasing positively, the growth of this industrial sector is far from normal conditions. Based on the author's financial reports, several companies, such as AISA and ALTO, experienced minus (losses) in their profits. There are even several companies that experienced minus earnings from 2016-2022. Based on mediaindonesia.com (2022), The food sector faces internal and external challenges in business development. Other internal

challenges include limited capital, management weaknesses, non-fulfillment of business standards and legality, and limited innovation capabilities. The external challenges include uncertainty in the supply of raw materials and fluctuations in raw material prices, and then market demand also decreases. Business actors are also faced with competition from competitors and new products. The growth in the performance of industrial companies can support national stability. Hence, it is essential to maintain the vitality of the industrial sector, especially the food and beverage industry.

Financial performance is a description of success assessed based on numerical measures in units of monetary value, namely by comparing financial realization with the budget (Ardila & Putri, 2015). One indicator of financial performance is the return on assets (ROA). ROA results from food and beverage companies for 2016-2022 can be seen in the following table:

**Table 1. ROA Value in Food and Beverage Sub-Sector Manufacturing Companies listed on the IDX 2016-2022 (In Percentage)**

No	Emiten Code	2016	2017	2018	2019	2020	2021	2022	Average
1.	CLEO	8.5	7.6	7.6	10.5	10.1	13.4	11.6	9.9
2.	DLTA	21.3	20.9	22.2	22.3	10.1	14.4	17.6	18.4
3.	INDF	6.4	5.8	5.1	6.1	5.4	6.2	5.1	5.7
4.	MLBI	43.3	52.7	42.4	41.6	9.2	22.8	27.4	34.2
5.	MYOR	10.7	10.9	10	10.7	10.6	6.1	8.8	9.6
6.	ICBP	12.6	11.2	13.6	13.8	7.2	6.7	4.9	10
7.	AISA	7.8	(9.7)	(6.8)	6.1	5.9	0.5	(3.4)	(0.1)
8.	ADES	7.3	4.6	6	10.2	14.2	20.4	22.2	12.1
9.	ALTO	(2.3)	(5.7)	3	(0.7)	0.9	(0.8)	(1.6)	(1.1)
10.	ULTJ	16.7	13.7	12.6	15.7	12.7	17.2	13.1	14,5

Source: <http://www.idx.co.id> (2022)

The author uses the return on assets (ROA) ratio to evaluate financial performance. ROA was chosen because it can measure the effectiveness of using all company resources in generating income. According to Mawardi (2005), ROA focuses more on the company's ability to generate revenue through its operations, while return on equity (ROE) only considers the return on the owner's investment.

Table 1 above shows that overall, food and beverage companies listed on the IDX in 2016-2022 experienced fluctuations. Only a

few companies were consistent with the growth in their ROA values. The highest average ROA value from 2016-2022 was found at PT. MLBI is 34.2%, and PT AISA and ALTO are the lowest at 0.1% and 1.1%, respectively. Companies that experienced a decline in financial performance values occurred on average from 2020-2021. An increase in total assets caused a reduced ROA, while the company's operating income decreased. The decrease in profit value based on the company's financial report that has been read is caused by a reduction in sales, so the company's income also decreases while debts increase.

At the DLTA company, the ROA value experienced a significant decrease in 2020 by 10.12% and 2021 by 14.36% compared to the previous year, namely 2017 at 20.86%, 2019 by 22.19%, and 2019 by 22.29%. PT. MLBI's ROA value experienced a significant decrease of 9.2% in 2020. PT. MYOR ROA value decreased in 2021 by 6.1%. At PT. ICBP ROA value decreased throughout 2016-2022, conversely at PT. ADES's ROA value continues to increase from 2016 to 2022. At PT. AISA ROA values grew negatively in 2017, 2018, and 2022, respectively, by 9.7%, 6.8%, and 3.4%. At PT. ALTO's average ROA value grew negatively from 2016 to 2022. At PT. ULTJ's ROA value will be stable from 2016 to 2022. Changes in financial performance (ROA) are caused by changes in profit after tax and total assets. A higher ROA indicates that the company is more effective in managing its assets, while a lower ROA indicates that the company is less effective in managing its assets.

The development of issues regarding sustainable reporting in Indonesia cannot be separated from the role of the National Center for Sustainability Reporting (NCSR), the first independent organization to develop sustainable reporting in Indonesia. In 2005-2007, NCSR was active in introducing and disseminating sustainability reports to companies in Indonesia, and since 2005, NCSR has been holding Sustainability

Reporting Awards (SRA), which are held once a year. However, starting in 2018, the SRA changed to the Asia Sustainability Reporting Rating (ASRR), which domestic and foreign companies can attend. However, its development shows a positive trend from year to year, although it is still relatively low compared to the total companies listed on the IDX.

In this research, researchers will analyze the factors influencing financial performance: firm size, capital structure, total asset turnover, and liquidity. Several studies have examined the factors that influence financial performance, such as Rahmah (2016), who states that CR and TATO positively and significantly affect company performance. Pham (2020) has found that firm size positively influences financial performance. Egbunike and Okerekeoti (2018) state that firm size has a positive and significant effect on ROA, leverage has a positive and significant impact on ROA, and liquidity has a positive and significant effect on ROA. In his research, Hemrit (2019) stated that firm size positively influences financial performance. Huynh (2021) found in his study that firm size positively affects the performance of small and medium enterprises in Vietnam. Pattiruhu and Josep (2020) stated that there is a positive influence between capital structure and financial performance. Prabhasyahrani's (2022) research found that liquidity positively and significantly affects profitability (ROA). Jannah (2020) stated in his study that liquidity ratios positively and significantly affect financial performance.

However, the findings above contradict the research results obtained by Alhassan et al. (2020), where firm size in South Africa was found to influence financial performance (ROA) negatively. Pham (2020) found that capital structure and asset structure have a negative effect on financial performance. Sheikh and Wang (2013) say there is a negative relationship between capital structure and performance. Lestari (2020) stated that total asset turnover does not affect

company performance. Mazhar et al. (2020) say liquidity negatively affects a company's financial performance.

The author suspects/predicts that variables play a role in influencing the influence of the independent variable on the dependent variable. Researchers found moderating variables based on theory and previous research. The moderating variable, good corporate governance, chosen in this research model, is thought to have a role in influencing the independent variable on the dependent. The good corporate governance variable was chosen because it has been studied as a moderating variable. Good corporate governance can affect the relationship between various other variables in the company context.

The role of good corporate governance as a moderating variable, research, or analysis can be more comprehensive in understanding how good corporate governance practices can influence various aspects of company operations and performance.

Based on the research results of Ayuningtyas and Mawardi (2022), GCG significantly strengthens the influence of capital structure on financial performance. GCG is significant and weakens the effect of firm size on financial performance. Maharani and Fauziati (2022) stated that GCG, proxied by independent commissioners, can moderate the influence of capital structure on financial performance. Rahma (2021) indicated that GCG cannot strengthen the impact of capital adequacy, credit risk, and liquidity risk on financial performance. Anathasius (2021) states that GCG significantly moderates and strengthens the influence of liquidity on profitability.

Based on the background description above and by looking at the results of previous research, the author is interested in taking the title "The Influence of Firm Size, Capital Structure, Total Asset Turnover Ratio, and Liquidity on Financial Performance with Good Corporate Governance as a Moderating Variable in Sub-Sector

Manufacturing Companies Food and Drinks Listed on the IDX 2016-2022".

## **LITERATURE REVIEW**

### **Financial Performance**

Financial performance describes the achievements that the company has achieved through various activities that have been carried out. Financial performance is a standard for evaluating a company's success in achieving profits (Sucipto, 2013). So, financial performance is a description of the work achievements obtained by the company in the financial sector in a certain period, which can be described through the company's financial reports. A company's financial performance can be measured using financial ratio analysis to determine the company's strengths and correct the company's weaknesses. Kasmir (2011) explains that financial ratios are calculated by comparing numbers in financial reports and dividing one number by another. Comparisons can be made between one component and another in one financial report or between components in financial statements.

Companies use financial performance measurements to improve their operational performance to compete. One way to measure financial performance is to assess profitability ratios. Profitability ratios are suitable because they measure a company's financial performance in generating profits using assets and equity. Assets and equity are essential parts that play a role in operational activities (Dwi, 2016).

This research uses the return on assets (ROA) ratio to measure financial performance. ROA describes the company's ability to earn profits from the resources it owns. This ratio is calculated by comparing net profit after tax with the total assets owned by the company. The higher the return on assets ratio, the better the company's performance in generating profits from the assets it owns.



$$\text{ROA} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}} \times 100\%$$

### Firm Size

Firm size describes the size of a company. Large companies can diversify production and business activities (Bykova & Lopez-iturriaga, 2018) and implement strategies to increase barriers to potential competitors. At the same time, large-scale companies have much power to negotiate the prices of input materials to reduce average costs (Pratheepan, 2014) and increase their profitability and performance (Piao & Moon, 2019). According to Firnanti (2011), firm size influences the company's funding needs if the company needs additional funds from outside parties. Large companies tend to have large amounts of assets, and firm size can influence the achievement of company targets in a certain period. In addition, firm size can explain why large companies have easier access to capital markets than small companies.

Companies that can access capital markets quickly have the flexibility and capacity to obtain larger funding. However, the condition is that the company must meet a higher dividend payout ratio than small companies. This differs from small companies that find it challenging to obtain funding in the capital market. This refers to Lessy's (2016) research on accessibility to capital markets and dividend payout ratios in corporate fundraising. The larger the firm size, the easier it will be for the company to enter the capital market and obtain a better credit rating from creditors. This can positively impact the level of profits obtained by the company. In this research, firm size is measured using the natural logarithm of total company assets (natural logarithm of assets).

$$\text{Firm Size} = \text{LN} (\text{Total Assets})$$

### Capital Structure

Capital structure compares the proportion of debt and own capital as a source of company funding. The quality of this capital structure will impact the company's financial condition. The optimal capital structure balances risk and returns, aiming to maximize the company's share price. In this case, a good capital structure has a level of debt within its capital. In other words, the maximum debt is the same as its capital. An optimal capital structure helps managers understand how the chosen capital combination can affect company value and increase expected profits (Sundjaja, 2002). Information regarding capital structure reflects the relationship between company management and creditors and investors (Harmono, 2011). Therefore, a research model that considers the relationship between these interested parties can be developed by analysing the function of capital structure and its impact on company performance.

The determined capital structure composition describes management's ability to manage the capital structure optimally by considering efficient capital costs. In this research, capital structure is measured using the debt-to-equity ratio. The debt-to-equity ratio (DER) is a financial ratio used to assess the proportion of debt to equity in a company. This ratio compares total debt, including current liabilities, with total equity. This ratio helps determine the amount of funds creditors provide compared to company owners. In other words, this ratio shows how much of each equity unit is used as collateral for debt. A higher DER indicates a worse financial position, while a lower DER indicates a stronger financial position. The lowest possible ratio is 100%.

$$\text{DER} = \frac{\text{Total Debt}}{\text{Total Equity}} \times 100\%$$

### **Activity Ratio**

According to Harahap (2011), the activity ratio reflects the level of activity carried out by the company in its operations, including sales, purchasing, and other activities. By using the activity ratio measurement, it can be seen to what extent the company's efficiency and effectiveness are in managing the assets it owns. Measuring activity ratios provide relevant information about various company activities so management can evaluate their performance.

This research uses the total assets turnover (TATO) ratio to measure the activity ratio. The total assets turnover ratio measures how much a company can turn over all its assets. It indicates how many sales are generated from each unit of investment. Harahap (2011) explains that this ratio reflects the total asset turnover to sales volume, in other words, how effective these assets are in creating sales revenue. A higher total assets turnover ratio indicates better performance. The faster the asset turnover, the more influential the company is in utilizing its resources, and this acceleration of asset turnover will contribute to increasing company profits. According to Harjito and Martono (2013), the total assets turnover ratio measures the turnover rate of all assets owned by the company. This ratio is calculated by dividing sales by the total assets owned by the company.

From the theory above, it can be concluded that TATO is a method for measuring a company's effectiveness in generating sales by utilizing the turnover of assets owned during a specific period.

$$\text{TATO} = \frac{\text{Sales}}{\text{Total Assets}} \times 100\%$$

### **Liquidity**

The liquidity ratio is a ratio that compares short-term debt with the current assets available to meet the company's obligations (Horne and Wachowicz, 2012). This ratio provides an overview of how current asset

components, such as cash and receivables not yet due, can be considered liquid to meet the company's obligations.

A company can better understand its ability to manage short-term liabilities and identify future cash needs by using liquidity ratios. According to Nurcahyani and Situngkir (2021), the higher the company's liquidity level, the better the company's financial condition will be. Liquidity ratios measure a company's ability to pay obligations or meet short-term debt. In this case, companies often rely on financing from short-term creditors to carry out their business activities. The company's liquidity level has a significant impact on financial performance. If a company experiences a decrease in its ability to pay short-term debt, financial performance will also decline, and vice versa. Thus, the state of a company's liquidity plays a vital role in determining financial performance.

In this research, the author uses the Current Ratio (CR) because it shows that current assets function as a means of payment and the components in current assets can be used to pay all company obligations. Meanwhile, for current liabilities, everything must be paid in full. Therefore, companies can utilize their current assets to meet their needs and obligations so that there are fewer idle funds. To calculate it, a comparison is made between total current assets and current liabilities. A good level of liquidity can be seen from a current ratio value of 200% or more. Even so, banks and financial institutions providing credit consider that the ideal current ratio level ranges from 200% to 300%, while the minimum acceptable level ranges from 100% to 150%.

$$\text{CR} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

### **Good Corporate Governance (GCG)**

Good corporate governance is a mechanism that regulates and controls company operations to balance the authority required by the company to ensure the sustainability of its business

and accountability towards stakeholders. This relates to the regulatory authority of owners, directors, managers, shareholders, and so on (Cardburry Committee, 2014). Corporate governance, also known as corporate governance, refers to a series of processes, habits, policies, rules, and institutions that influence a company's direction, management, and control (Kusumawardhani, 2012).

In this research, good corporate governance is proxied by the proportion of independent commissioners. The reason is that the board of commissioners plays an essential role in implementing good corporate governance because the board of commissioners is the core of corporate governance whose task is to ensure the implementation of company strategy, supervise management in managing the company, and require accountability. The role of the board of commissioners is likely to minimize agency problems that arise between the board of directors and shareholders. Good corporate governance is a company rule to direct and control the company's operational activities so that the company's operations are better controlled. Good corporate governance aims to provide progress towards company performance. The efficiency and effectiveness of the Board of Commissioners' performance in supervising management can strengthen the sense of responsibility in managing the company's business and resources, thereby maximizing profits. When profits increase, there will be an increase in financial performance. Fraud caused by opportunistic behaviour by management can be controlled well, thereby minimizing agency problems.

The company's General Meeting of Shareholders (GMS) decision determines the appointment of independent commissioners. According to Bank Indonesia Circular Letter Number 15/15/DPNP, independent members of the Board of Commissioners must constitute

around 50% of the board of commissioners. According to the National Committee for Governance Policy (2006), independent commissioners refer to members of the Board of Commissioners who have no affiliation with management, other members of the Board of Commissioners, or controlling shareholders. They must be free from business relationships that could affect their ability to act sincerely in the company's interests.

Proportion the board of commissioners

$$= \frac{\text{Number of independent commissioners}}{\text{Number of independent commissioners}} \times 100\%$$

### Framework

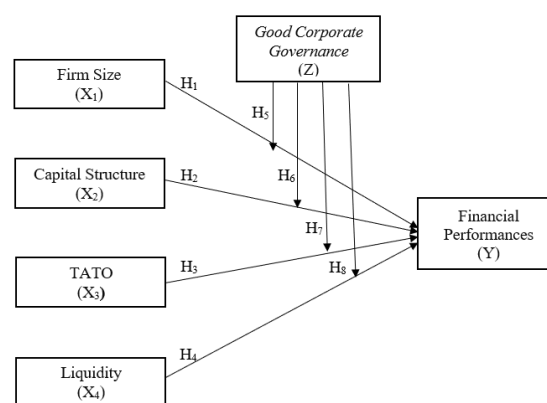


Figure 1. Framework

H1: Firm size has a positive and significant effect on financial performance.

H2: Capital structure has a negative and significant effect on financial performance.

H3: Total assets turnover ratio positively and significantly affects financial performance.

H4: Liquidity has a positive and significant effect on financial performance.

H5: Good corporate governance positively and significantly moderates the relationship between firm size and financial performance.

H6: Good corporate governance moderates the negative and significant relationship between capital structure and financial performance.

H7: Good corporate governance moderates the positive and significant relationship between the total asset turnover ratio and financial performance.

H8: Good corporate governance positively and significantly moderates the relationship between liquidity and financial performance.

## **MATERIALS & METHODS**

This type of research is associative research with a cause-and-effect relationship. Causal research is a cause-and-effect relationship where one of the independent variables influences the dependent variable. This means that this research focuses on the influence of firm size, capital structure, total asset turnover ratio, and liquidity on financial performance, with good corporate governance as a moderating variable. The approach used in this research is quantitative. The research data is secondary data obtained from annual reports on food and beverage sub-sector manufacturing companies on the IDX. The data used is panel data (Pooling Data). Panel data is a combination of time series and cross-section data.

The population researchers chose as research objects were food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (BEI) in 2016-2022. 47 food and beverage companies are used as the population in this study.

Sampling in the research was purposive sampling. Purposive sampling is a method of taking samples based on specific considerations per the research objectives. The criteria set in sampling in this study were determined as follows:

1. Food and beverage sub-sector companies listed on the Indonesia Stock Exchange during 2016-2022.
2. Companies that publish financial reports for 7 (seven) consecutive years during 2016 - 2022.

3. Food and beverage sub-sector companies with complete financial data containing the information needed for research conducted during 2016-2022.

Based on the criteria above, the sample in this research is 140 samples (20 companies x 7 years of research). This study analysed data using the Econometric Views Student Version (EViews) 10 software tool.

## **RESULT**

### **A. Selection Of Estimation Models**

Three models use panel data regression, namely: Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) by carrying out three models of reform in realizing the regression model, namely Chow Test, Hausman Test, and Lagrange Multiplier.

### **Chow Test**

Chow's Test was used to determine whether the Common Effect Model or Fixed Effect Model is the most appropriate for the regression model. There are hypotheses in carrying out this test, namely:

- H0 = Probability > 0.05, then CEM is used  
 H1 = Probability < 0.05, then FEM is used.

**Table 2. Chow Test Result**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	9.508678	(19,115)	0.0000
Cross-section Chi-square	132.201233	19	0.0000

*Source: Data Processed with EView, 2023*

Table 2 above shows the cross-section probability value F and chi-square  $0.000 < \alpha = 0.05$ . If the probability value is  $> \alpha = 0.05$ , then the regression model used is the CEM model. If the probability value is  $< \alpha = 0.05$ , then the regression model used is the FEM model. So, the panel data regression model used is the fixed effect model (FEM).

### **Hausman Test**

The Hausman Test was used to determine whether the Fixed Efficiency Model (FEM) or Random Effect Model (REM) is the most



appropriate in determining the regression model. There are hypotheses in interpreting the test, namely:

H0 = Probability > 0.05, then use REM,

H1 = Probability < 0.05, then FEM is used

Table 3. Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	135.393610	5	0.0000

Source: Data Processed with EViews, 2023

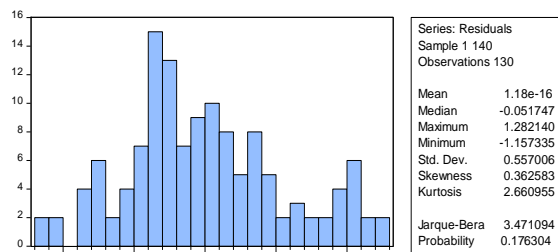
Table 3 above shows the Hausman Test above the prob value = 0.000 < α = 0.05. If the probability value is > α = 0.05, then the regression model used is the REM model. If the probability value is < α = 0.05, then the regression model used is the FEM model. So, the panel data regression model used is the fixed effect model (FEM).

The Lagrange multiplier (LM) test compares the CEM and REM models. This test is required when the Chow test result is CEM, and the Hausman test result is REM. In this study, the results of the Chow test were a fixed effect model, so there was no need to carry out an LM test.

## B. Classic Assumption Test

### Normality Test

The residual value resulting from panel data regression can be shown through a probability value to detect whether the residual has a normal distribution. In this study, the results of the normality test were as follows:



Source: Research Results (2023)

Figure 2. Normality Test Result

### Multicollinearity Test

Symptoms of multicollinearity can be seen from the large VIF (Variance Inflation Factor) value. This measure describes each

independent variable, which other independent variables explain. The results of the multicollinearity test are as follows:

Table 4. Multicollinearity Test Result

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	1.274795	151.8750	1.121270
X1	0.109167	127.1437	1.021270
X2	0.013069	1.769577	1.657461
X3	0.009887	1.189697	1.060491
X4	0.010880	1.973808	1.637517
Z	0.245239	28.01231	1.094003

Source: Data Processed with EViews, 2023

Table 3 above shows the centered VIF value for each variable < 10, with respective values of X1 (1.021), X2 (1.657), and X3 (1.060), prediction model.

## C. Research Hypothesis Test

### Regression Analysis with Panel Data

Based on the Chow and Hausman tests, the panel data regression model selected is the fixed effect model. The results of the fixed effect model are as follows:

Table 5. Fixed Effect Model Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26.79055	2.594862	10.32446	0.0000
Ukuran Perusahaan	-1.096551	0.109199	-10.04182	0.0000
Struktur Modal	-0.081021	0.021798	-3.716950	0.0003
TATO	0.824941	0.184858	4.462573	0.0000
Likuiditas	-0.005760	0.004010	-1.436531	0.1536
R-squared	0.638411	Mean dependent var		0.142167
Adjusted R-squared	0.562949	S.D. dependent var		0.714954
S.E. of regression	0.472655	Akaike info criterion		1.499531
Sum squared resid	25.69134	Schwarz criterion		2.024825
Log likelihood	-79.96719	Hannan-Quinn criter.		1.712995
F-statistic	8.460024	Durbin-Watson stat		1.800727
Prob(F-statistic)	0.000000			

Source: Data Processed with EViews, 2023

Table 5 above shows the panel data equation model as follows:

$$Y = 26.790 - 1.096X1 - 0.081X2 + 0.824X3 - 0.005X4$$

From the equation above it can be explained as follows:

1. The constant value is 26,790, meaning that if the values of all variables are equal to zero, then the financial performance variable (Y) is equal to 26,790.
2. The firm size coefficient value (X1) is - 1,096, meaning that firm size negatively influences financial performance, so if

- the firm size increases by 1, financial performance will decrease by -1,096.
3. The value of the capital structure coefficient (X2) is -0.081, meaning that firm size negatively influences financial performance, so if the capital structure increases by 1, financial performance will decrease by -0.081.
  4. The coefficient value for the total assets turnover ratio (X3) is 0.824, meaning that TATO positively influences financial performance, so if TATO increases by 1, financial performance will increase by 0.824.
  5. The liquidity coefficient (X4) value is -0.005, meaning liquidity negatively influences financial performance. If liquidity increases by 1, financial performance will decrease by -0.005.

#### **F (Simultaneous) Statistical Test**

The F test determines whether all independent variables together (simultaneously) influence the dependent variable. The F test is used with a significance level of 0.05. according to Ghozali (2012:98), the basis for decision-making is as follows:

1. If the probability value is  $<0.05$ , the independent variables together (simultaneously) influence the dependent variable together.
2. If the probability value is  $> 0.05$ , the independent variables together (simultaneously) do not affect the dependent variable.

Based on Table 5 above shows that the Prob value is  $0.000 < \alpha= 0.05$ , meaning that the variables firm size (X1), capital structure (X2), total assets turnover ratio (X3), and liquidity (X4) simultaneously have a significant effect on financial performance (Y).

#### **T (Partial) Statistical Test**

The T statistical test shows how far the influence of one independent variable is in explaining the dependent variable. The hypothesis is formulated as follows:

1.  $H_0: X_i = 0$ , meaning that the independent variable has no significant effect on the dependent variable.
2.  $H_1: x_i \neq 0$ , meaning that the independent variable significantly affects the dependent variable.

Reception or rejection of hypotheses in a study can be done with the following criteria:

1. If the significance value of the statistic  $T > 0.05$ , then  $H_0$  is received. This means that an independent variable individually does not influence the dependent variable.
2. If the statistical t's significance value  $< 0.05$ , then  $H_0$  is rejected. This means that an independent variable individually affects the dependent variable.

Table 5 above shows that firm size (X1) has a t-statistic value of -10.072 and a probability value of  $0.000 < \alpha= 0.05$ , meaning that firm size has a negative and significant influence on financial performance (Y). Capital structure (X2) has a t-statistic value of -3.721 and a probability value of  $0.000 < \alpha= 0.05$ , meaning that partial capital structure has a negative and significant influence on financial performance (Y). The total assets turnover ratio (X3) has a t-statistic value of 4.464 and a probability value of  $0.000 < \alpha= 0.05$ , meaning that partially the total assets turnover ratio has a positive and significant influence on financial performance (Y). Liquidity (X4) has a t-statistic value of -1.438 and a probability value of  $0.152 > \alpha= 0.05$ , meaning that partial liquidity has a negative and insignificant effect on financial performance (Y).

#### **Determination Coefficient Test**

The coefficient of determination ( $R^2$ ) measures how far the model's ability explains the dependent variable. The range of value is 0 to 1. If the value of  $R^2$  is small, the ability of independent variables to explain the variation of the dependent variable is minimal. Conversely, if  $R^2$  is large (close to the value 1), it means the ability of

independent variables to explain the variety of large dependent variables.

Based on Table 5 above, the adjusted r-squared value is 0.562 (56.2%), meaning that the independent variables firm size (X1), capital structure (X2), total assets turnover ratio (X3), and liquidity (X4) can influence performance. Finance (Y) was 56.2%, and the remaining 44.6% was influenced by other variables not examined in this research.

### Moderating Test

The moderated regression analysis (MRA) test determines whether the moderating variable can moderate the relationship between the independent and dependent variables. The following are the results of the moderating variable test:

**Table 6. Regression Results with Moderating Variables**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.45665	3.380654	6.051091	0.0000
X <sub>1</sub>	-0.859956	0.132888	-6.471282	0.0000
X <sub>2</sub>	0.222164	0.108347	2.050491	0.0427
X <sub>3</sub>	0.928256	0.810315	1.145550	0.2544
X <sub>4</sub>	0.025075	0.018129	1.383145	0.1694
Z	9.227729	4.086956	2.257849	0.0259
X <sub>1</sub> Z	-0.348359	0.159709	-2.181212	0.0313
X <sub>2</sub> Z	-0.708162	0.255916	-2.767170	0.0066
X <sub>3</sub> Z	3.975945	1.940507	2.048921	0.0428
X <sub>4</sub> Z	-0.079616	0.044864	-1.774605	0.0787

Source: Data Processed with EViews, 2023

Based on Table 6, each interaction between moderating variables, namely firm size (X1), capital structure (X2), total assets turnover ratio (X3), liquidity (X4), good corporate governance (Z), on financial performance (Y) can be seen as follows:

1. The probability value of firm size (X1)\*GCG(Z) = 0.031 < α = 0.05, meaning that good corporate governance is a moderating variable for the relationship between firm size and financial performance (Y).
2. The probability value of capital structure (X2)\*GCG(Z) = 0.006 < α = 0.05, meaning that good corporate governance is a moderating variable for the relationship between capital structure and financial performance (Y).
3. The probability value of total assets turnover ratio (X3)\*GCG(Z) = 0.042 < α = 0.05, meaning that good corporate governance is a moderating variable for

the relationship between total assets turnover ratio and financial performance (Y).

4. The probability value of liquidity (X4)\*GCG(Z) = 0.078 > α = 0.05, meaning that good corporate governance is not a variable moderating the relationship between liquidity and financial performance (Y).

### CONCLUSION

Based on the discussion in the previous chapters and answered problem formulation, research objectives, and referring to the process and results of data analysis in this study, several conclusions can be drawn as follows:

1. Firm size negatively and significantly affects the financial performance of food and beverage sub-sector manufacturing companies listed on the IDX in 2016-2022.
2. Capital structure negatively and significantly affects the financial performance of food and beverage sub-sector manufacturing companies listed on the IDX in 2016-2022.
3. Total assets turnover ratio positively and significantly affects financial performance in food and beverage sub-sector manufacturing companies listed on the IDX in 2016-2022.
4. Liquidity has a negative and insignificant effect on the financial performance of food and beverage sub-sector manufacturing companies listed on the IDX in 2016-2022.
5. Good corporate governance has a negative and significant effect in moderating the relationship between firm size and financial performance in food and beverage sub-sector manufacturing companies listed on the IDX in 2016-2022.
6. Good corporate governance negatively and significantly moderates the relationship between capital structure and financial performance in food and beverage sub-sector manufacturing

companies listed on the IDX in 2016-2022.

7. Good corporate governance has a positive and significant effect in moderating the relationship between the total assets turnover ratio and financial performance in food and beverage sub-sector manufacturing companies listed on the IDX in 2016-2022.
8. Good corporate governance has a negative and insignificant effect. It does not moderate the relationship between liquidity and financial performance in food and beverage sub-sector manufacturing companies listed on the IDX in 2016-2022.

### **RESEARCH LIMITATIONS**

Based on the discussion and conclusions that have been put forward, this research still has several limitations, namely:

1. The scope of this research is limited to the variables firm size, capital structure, TATO, and liquidity on financial performance with GCG as a moderating variable, so it is still possible to look for other variables related to financial performance as indicated by the coefficient of determination value of 56% and the remaining 44% is influenced by other variables not examined in this research.
2. This research has a sample of 20 companies from a population of 47 that fit the criteria that can be tested in the food and beverage sub-sector. This research only focuses on industrial companies in the food and beverage sub-sector.

### **SUGGESTIONS**

So that future researchers can further refine the limitations of the research in this study, the researcher makes the following suggestions:

1. Future researchers need to add financial and non-financial variables as research variables.
2. Future researchers are expected to be

able to use more than one moderating variable and add intervening variables.

3. Further research can add samples from various sub-sectors listed on the IDX, which might provide better results in predicting financial performance.

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