## Analysis of Capital Structure and Agency Cost on Company Performance with Managerial Ownership as Moderating Variables

(Study on Manufacturing Companies Listed on the Indonesia Stock Exchange 2019-2021 Period)

Febrianan Puji Lestari<sup>1</sup>, Kurnia Rina Ariani<sup>2</sup>

<sup>1</sup>Faculty of Economics and Business, Muhammadiyah University of Surakarta, Indonesia <sup>2</sup>Faculty of Economics and Business, Muhammadiyah University of Surakarta, Indonesia

**Abstract:** This study aims to empirically prove and analyze the significance of capital structure and agency costs on the performance of companies with managerial ownership as a moderating variable in manufacturing companies listed on the Indonesia Stock Exchange during the 2019-2021 period. The sample collection method uses purposive sampling, which is in accordance with predetermined criteria. The number of research samples is 220 populations. Based on the research criteria, there were 88 companies that passed as samples. This study uses quantitative methods with multiple linear regression analysis and Moderated Regression Analysis (MRA). Data collection was carried out using the documentation method in the form of the company's financial statements which became the research sample.

Keywords: Capital Structure, Agency Cost, Company Performance, Managerial Ownership.

#### 1. Introduction

The company was founded with a predetermined vision and mission. The vision and mission contains an overview of the targets to be achieved by the company so that it is very useful in preparing a mature strategy to achieve these targets. Companies that are able to have an integrated strategy are believed to be able to generate profits, so that companies are able to compete competitively[1]. In addition, the profits derived from these operational activities will also be very beneficial for the welfare of employees, employees, creditors and investors. The higher the level of profit earned means that the company has a good ability to process its resources so that the company's performance also increases. Improved company performance is influenced by several factors such as capital structure, agency costs and managerial ownership. The capital structure is a comparison between own capital and loan capital, so that the capital structure is considered capable of describing the company's funding sources. Good capital structure management will help the company to minimize losses that result in decreased company performance. In the company can not be separated from the role of principals and agents, where between the two will maximize their respective goals. Supervision of the behavior of managers needs to be done so that managers do not act according to their own will which results in losses to the company and also shareholders. Usually, shareholders will incur costs to monitor each level of manager behavior or are called agency costs. Agency conflicts can be minimized by managerial ownership, this is because even the slightest risk the manager will share the risk so that managers tend to act carefully and report any information according to the existing reality. Supervision of the behavior of managers needs to be done so that managers do not act according to their own will which results in losses to the company and also shareholders. Usually, shareholders will incur costs to monitor each level of manager behavior or are called agency costs. Agency conflicts can be minimized by managerial ownership, this is because even the slightest risk the manager will share the risk so that managers tend to act carefully and report any information according to the existing reality. Supervision of the behavior of managers needs to be done so that managers do not act according to their own will which results in losses to the company and also shareholders. Usually, shareholders will incur costs to monitor each level of manager behavior or are called agency costs. Agency conflicts can be minimized by managerial ownership, this is because even the slightest risk the manager will share the risk so that managers tend to act carefully and report any information according to the existing reality.

### 2. Literature Review and Hypothesis

#### 2.1 Agency Theory

Jensen and Meckling (1976) agency theory is an agreement between two or more people involving agents to be given certain responsibilities and authority in decision making to agents. This theory explains that an agent has more information than a principal, because an agent is directly involved in company activities while the principal is not[2]. Agency problems will arise if there is an abuse of authority that has been given by the

principal to the agent which results in losses.

#### 2.2 Signal Theory

Signal theory is an action taken by management to provide signals or instructions to investors about how management views the company's prospects. This theory explains the reasons why companies provide information to outsiders. According to (Bergh al, 2014) this reason is based on the existence of information asymmetry between company management and external parties. Company management must submit financial reports that are accurate and relevant to the interests of external parties. A good signal will be obtained if the report submitted is in accordance with the actual situation and in accordance with the interests of external parties. Conversely, if the report submitted is not appropriate, it is called a bad signal. A bad signal will cause an investor to doubt the company's performance and can affect investors' decisions.

#### 2.3 Capital Structure

The capital structure is defined as the ratio between the portion of the company's capital originating from long-term debt and the portion of the company's capital. The capital structure contains policies on the use of funds and sources of funds that will be used for the company's operational activities to achieve maximum profit, so that the company's value increases. Based on the results of research conducted by(Revelation 2022)And(Andarsari 2021)shows that the capital structure has a positive effect on company performance. H1: Capital structure influences company performance.

#### 2.4 Agency Costs

Within the company there are parties that contribute to improving company performance including principals and agents. An agency relationship occurs when there is a contract between the principal and the agent to do work. In this case an agent tends to behave according to his own interests and can harm the principal. Therefore, there is a need for monitoring, for example paying an auditor to audit the company's financial statements. it is intended that the principal can control the agent's behavior in accordance with predetermined provisions. These costs incurred by the principal are called agency costs. Based on research conducted by(Ariana 2023)shows that agency cost simultaneously has a significant effect on company performance.

H2: Agency costs affect company performance.

# 2.5 Managerial Ownership Moderates the Relationship between Capital Structure and Company Performance

In a company, investors exercise oversight of responsibility by increasing the proportion of debt for the company in a certain amount to the capital owned by the company to support funding. Here the company's management has a role as a shareholder which is useful for improving performance. The management who owns shares tends to act carefully so that their decisions do not harm the company, because if there is a problem with the company, the management will bear the risk. A large contribution from management can improve performance in a company. Based on research conducted by(Septiarni, Widiasmara, and Moh. 2021)states that managerial ownership is able to moderate the relationship between capital structure and financial performance H3: Managerial ownership moderates the effect of capital structure on firm performance

#### 2.6 Managerial Ownership Moderates the Relationship between Agency Cost and Company Performance

Agency relationship is a relationship that is prone to conflict[7]. A principal always tries to use the funds as well as possible in order to minimize risk, while agents behave in their own interests. So this is often contrary to the interests of the principal. One effort to reduce agency costs is managerial ownership. Managerial ownership in the company has a positive impact on improving performance in share interests and personal interests. so that it can be said that the higher the proportion of managerial ownership in a company, the easier it will be to align the interests of managers and shareholders. Based on research conducted by(Prastiwi and Dewi 2019)Managerial ownership is able to moderate the relationship between agency costs and financial distress H4: Managerial ownership moderates the effect of agency cost on firm performance.

#### 3. Methodology

#### 3.1 Research design

This study uses a quantitative method, a process of finding knowledge that uses data in the form of mathematics or numeric as a means of analyzing information about what one wants to know (Kasiram 2007:5). This study aims to analyze how the effect of capital structure and agency costs on the performance of companies

with managerial ownership as a moderating variable in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021.

#### **3.2 Population and Sample**

The population in this study are manufacturing companies listed on the Indonesia Stock Exchange during the 2019-2021 period. Research data obtained through the website www.idx.id and the official website of the related company. The sample used is a company that meets predetermined criteria or is called the purposive sampling method. Some companies that meet the sample criteria are as follows:

	Table 1 Sampling					
No	Amount					
Manu	facturing company listed on the Indonesia Stock Exchange	220				
Samp	ling criteria (purposive sampling)					
1.	Companies that are not listed on the Indonesia Stock Exchange consecutively	-29				
	during the study period					
2.	Companies that do not publish annual financial reports consecutively during	-36				
	the 2019-2021 period					
3.	-39					
4.	-69					
5.	The company did not experience successive profits during the 2019-2021	-120				
	period					
Resea	88					
Total	Total Sample (nx 3 study periods) (88 x 3 years)264					
Outlie	Outliers Data 23					
Obset	Observation Data 241					

Source: processed secondary data, 2023

#### 3.3 Data analysis method

Testing the hypothesis in this study uses the multiple regression method, which is carried out to determine how much influence the independent variables, namely capital structure and agency costs, have on company performance as the dependent variable. To test the moderating variable, a Moderated regression analysis (MRA) test was carried out. The following is the regression equation model used in this study:

Model 1 Regression Equation (Multiple Linear Regression Analysis)  $Y = \alpha + \beta 1 X 1 + \beta 2 X 2 + e$ 

Model 2 Regression Equation (MRA)  $KP = \alpha + \beta 1X1 + \beta 2X2 + \beta 3Z + \beta 4X1 * Z + \beta 5X2 * Z + e$ 

Information:

- = Constant α
- = Regression Coefficient β1-β5
- Y = Company Performance
- X1 = Capital Structure
- X2 =Agency costs
- = Managerial Ownership Ζ
- X1\*Z = Interaction between capital structure and managerial ownership
- X2\*Z = Interaction between *agency costs* with managerial ownership
- =Error e

International Journal of Latest Research in Humanities and Social Science (IJLRHSS) Volume 06 - Issue 05, 2023 www.ijlrhss.com // PP. 49-54

Table 3   Statistical Test Results									
Variable	N	Minimum	Maximum	Means	std. Deviation				
CAPITAL STRUCTURE COST AGENCY	241 241	7.00 14.00	382.00 1303.00	78.9834 132.1245	62.45411 99.67590				
COMPANY PERFORMANCE	241	0.00	145.00	12.6058	14.24014				
MANAGERIAL OWNERSHIP	241	0.00	100.00	11.1909	22.46267				
Valid N (listwise)	241								

Source: processed secondary data, 2023

Based on the table above, it is known that the number of samples is 241 companies. The capital structure has a minimum value of 7.00, a maximum of 382.00, a mean of 78.9834 and a standard deviation of 64.45411. Agency cost has a minimum value of 14.00, a maximum of 1303.00, a mean of 132.1245 and a standard deviation of 99.67590. The company's performance has a minimum value of 0.00, a maximum of 145.00, a mean of 12.6058 and a standard deviation of 14.24014. Managerial ownership has a minimum value of 0.00, a maximum of 100.00, a mean of 11.1909 and a standard deviation of 22.46267.

#### **3.5 Classic Assumption**

#### 3.5.1 Normality Test

The normality test is used to test whether the data is normally distributed or not. In this study, the data tends to be not normally distributed so it uses the Central Limit Theorem (CLT) assumption. This assumption can be used if the number of observational data is > 30, then there is no need to do a normality test and can be ignored (Ajija et al, 2011: 42). This study has a sample of 241 > 30, so it can be said that the data is normally distributed.

#### 3.5.2 Multicollinearity Test

Table 4							
Multicollinearity Test Results							
Variable tolerance VIF Information							
CAPITAL STRUCTURE	0.996	1.004	There is no multicollinearity				
COST AGENCY	0.996	1.004	There is no multicollinearity				
CODITIOLITEI	0.770	1.00+	There is no multiconnearity				

Source: processed secondary data, 2023

From the table above, it can be seen that all independent variables, namely capital structure and agency cost, have a tolerance value of > 0.10 and VIF < 10. So it can be concluded that the regression model in this study did not have multicollinearity.

#### 3.5.3 Heteroscedasticity Test

Table 5								
Heteroscedasticity Test Results								
Variable	Equation 1	Equation 2	Information					
CAPITAL STRUCTURE	0.482	0.420	Free of Heteroscedasticity					
COST AGENCY	0.718	0.890	Free of Heteroscedasticity					
MANAGERIAL		0.937	Free of Heteroscedasticity					
OWNERSHIP								
X1_Z		0.563	Free of Heteroscedasticity					
Z		0.997	Free of Heteroscedasticity					

Source: processed secondary data, 2023

#### International Journal of Latest Research in Humanities and Social Science (IJLRHSS) Volume 06 - Issue 05, 2023 www.ijlrhss.com // PP. 49-54

Based on the table above, it can be seen that each variable in equation 1 and equation 2 shows that the significance value is > 0.05. So it can be concluded that the two equations are free from the variance of the residuals from one observation to another.

#### **3.5.4 Autocorrelation Test**

Table 4.5							
Autocorrelation Test Results							
Adjusted R std. Error of							
R R Square Square the Estimate Du							
0.197a	0.039	0.031	14.01821	1,836			
0.246a	0.061	0.041	13.94739	1,834			
	0.197a	AutocorreRR Square0.197a0.039	Autocorrelation Test ResAdjusted RRR Square0.197a0.0390.031	Autocorrelation Test ResultsAdjusted Rstd. Error ofRR SquareSquarethe Estimate0.197a0.0390.03114.01821			

Source: processed secondary data, 2023

The results of the autocorrelation test in equation 1 show a DW value of 1.836 and equation 2 shows a DW value of 1.834 which means that the DW value is between -2 to +2. So it can be concluded that the regression model is free from autocorrelation problems.

#### 3.6 Accuracy Test 3.6.1 F test

Table 6								
F test results								
	Model	Sum of Squares	df	Mean Square	F	Sig.		
Equation 1	Regression	1898,145	2	949,073	4,830	0.009b		
	residual	46769,406	238	196,510				
Total 48667,552 240								
Equation 2	Regression	2953,094	5	590,619	3,036	0.011b		
	residual	45714,458	235	194,530				
	Total	48667,552	240					

Source: processed secondary data, 2023

The regression results from equation 1 show that the significance value is 0.009b and the regression equation 2 shows a significance value of 0.011b, because the significance value is <0.05, it can be concluded that the independent variables namely capital structure, agency costs and company performance moderated by managerial ownership have fit models.

# **3.6.2** Test of the Coefficient of Determination (R2)

	lable /							
	Test Results for the Coefficient of Determination (R2)							
	R R Square Adjusted R Square std. Error of the Estimate							
Equation 1	0.197a	0.039	0.031	14.01821				
Equation 2	0.246a	0.061	0.041	13.94739				

Source: processed secondary data, 2023

From the table above shows that the value of the coefficient R2 in equation 1 is 0.031. This means that the independent variables, namely capital structure and agency costs, are able to explain the dependent variable, namely company performance of 03.1% or in other words that the model is weak, and 96.9% is influenced by other variables.

#### 3.6.3 T test

Table 8							
T test results							
Variable	Equation 1		Equation 2		Information		
	t	Sig	t	Sig			
(Constant)	8,943	0.000	8,722	0.000			
CAPITAL STRUCTURE	-0.956	0.340	-1,331	0.184	H1 Rejected		
COST AGENCY	-3,013	0.003	-2,824	0.005	H2 Accepted		
MANAGERIAL			0.070	0.944	-		

### International Journal of Latest Research in Humanities and Social Science (IJLRHSS) Volume 06 - Issue 05, 2023

www.ijlrhss.com // PP. 49-54

OWNERSHIP			
X1_Z	0.063	0.949	H3 Rejected
X2_Z	-1,069	0.286	H4 Rejected

Source: processed secondary data, 2023

The significance value of the capital structure variable shows a value of 0.340, which means that capital structure has no effect on company performance because the significant value of the capital structure variable is 0.340 which is greater than 0.05 so it can be concluded that H1 is rejected.

The significance value of the agency cost variable shows a value of 0.003, which means that agency cost affects company performance because the significant value of the capital structure variable is 0.340 which is smaller than 0.05 so it can be concluded that H2 is accepted.

The significance value of the capital structure variable with managerial ownership as a moderating variable shows a value of 0.949 which means that capital structure with managerial ownership moderation does not affect company performance because the significant value of the capital structure variable is 0.949 which is greater than 0.05 so it can be concluded that H3 is rejected.

The significance value of the agency cost variable with managerial ownership as a moderating variable shows a value of 0.286, which means that agency cost with moderation of managerial ownership does not affect company performance because the significant value of the capital structure variable is 0.286 which is greater than 0.05 so it can be concluded that H4 is rejected.

#### 5. Conclusion

This study aims to analyze the effect of capital structure and agency costs on the performance of companies with managerial ownership as a moderating variable in manufacturing companies listed on the IDX for the 2019-2021 period. Based on the results of the analysis and discussion it is concluded that capital structure has no effect on company performance. Agency costs affect the company's performance, while ownership is not able to moderate the relationship between capital structure and agency costs on company performance. the limitations of this study only used 2 independent variables, namely capital structure and agency costs and the research period was only carried out for 3 years, namely from 2019-2021.

#### 6. References

- [1] D. Maryam, "The Influence of Capital Structure and Company Size on Agency Costs and Company Performance (Studies of Manufacturing Companies in the Consumer Goods Industry Sector Listed on the Indonesian Stock Exchange),"*J. Account. and Taxes*, vol. 18, no. 2, p. 196, 2018, doi: 10.29040/jap.v18i2.155.
- [2] BM Tsaqif and W. Agustiningsih, "The Influence of Financial Distress and Company Size on Profit Management with Managerial Ownership as a Moderating Variable," J. Account. and Gov., vol. 2, no. 1, p. 53, 2021, doi: 10.24853/jago.2.1.53-65.
- [3] KT Wahyuni, "The Influence of Capital Structure on Company Performance in Health Industry Shares on the Indonesian Stock Exchange," *JIIP J.Ilm. Educator Science.*, vol. 5, no. 5, pp. 1374–1381, 2022, doi: 10.54371/jiip.v5i5.569.
- [4] PR Andarsari, "The Influence of Capital Structure and Ownership Structure on Company Performance (Study of Financial Services Sector Companies for the 2015-2017 Period),"*J. Accounts. financec. issue*, vol. 2, no. 1, pp. 11–20, 2021.
- [5] R. Ariana, "The Influence of the Implementation of Good Corporate Governance (GCG) and Agency Cost on the Performance of Manufacturing Companies in the Food and Beverage Sub Sector Listed on the Indonesia Stock Exchange (IDX) for the 2013-2017 Period," vol. 5, no. 1, pp. 1–23, 2023.
- [6] I. Septiarni, A. Widiasmara, and U. Moh., "The Influence of Company Size and Capital Structure on Financial Performance with Managerial Ownership as a Moderating Variable (Case Study of Manufacturing Companies Listed on the IDX for the 2016-2020 Period) Ika,"*Monday. inov. Manaj. Business and Accounts.* 3, pp. 2–19, 2021, [Online]. Available: https://medium.com/@arifwicaksanaa/pengertian-use-case-a7e576e1b6bf
- [7] Managerial DANK, T. Management, L. With, S. Variables, and I. On, "Regarding Profit Management With Agency Costs," vol. 28, no. 2, pp. 188–206, 2020.
- [8] BI Prastiwi and R. Dewi, "The Influence of Managerial Agency Costs on Financial Distress with Ownership Structure as a Moderating Variable," *J. Information, Taxation, Accounting, and Finance. Public*, vol. 14, no. 1, pp. 81–104, 2019, doi: 10.25105/jipak.v14i1.5016.