Khairunnisa Br Manurung<sup>1</sup>, Rina Br Bukit<sup>2</sup>. Parapat Gultom<sup>3</sup>.

Universitas Sumeatera Utara Medan Correspondence E-mail: <a href="mailto:khairunnis1997@gmail.com">khairunnis1997@gmail.com</a>

#### Abstract

The aim of this research is to test and analyze whether leverage, sales growth, operating capacity, and good corporate governance (GCG) influence the financial distress prediction of the Altman Z Score model with profitability as a moderating variable in transportation subsector companies listed on the Indonesia Stock Exchange in 2020 -2022. This research was carried out with a documentation study. This research uses secondary data, namely in the form of company financial reports for 2020-2022 which are published on the Indonesia Stock Exchange and can be obtained via the website www.idx.co.id. The sampling technique used was the purposive sampling method. Hypothesis testing uses binary logistic regression analysis. The research results show that leverage has a positive and significant effect on financial distress. Meanwhile, sales growth, operating capacity and good corporate governance have no effect on financial distress. However, profitability is able to moderate the effect of leverage on financial distress. However, profitability is unable to moderate the influence of sales growth, operating capacity and good corporate governance on financial distress.

Keywords: Leverage, Sales Growth, Operating Capacity, Good Corporate Governance, Profitability, Financial Distress, Altman Z Score.

#### 1. INTRODUCTION

Every company that is founded has the hope of being able to maintain the company's survival (going concern), develop its business rapidly and be able to survive for a long time in order to achieve maximum profits for the company. Companies are required to pay close attention to their business performance, because if not, financial distress will occur which will result in the company going bankrupt (going out of business) and ceasing operations because it is no longer able to finance the company's operations to continue running. The risk of bankruptcy of a company can be measured and identified through its financial reports, namely analyzing the financial reports for a certain period by the company concerned. Financial report analysis is a very important and main medium for knowing the company's financial condition and the results obtained in choosing the business strategy to be implemented.

The level of company health is also important in increasing efficiency in carrying out its operations, so that the ability to gain profits can be increased so that the company can avoid the possibility of bankruptcy or liquidation of the company. Therefore, if actions are taken to analyze predictions of bankruptcy, in this case the company is expected to be able to take early steps to avoid and reduce the risk of bankruptcy. Financial distress can occur due to errors in company financial management. Several types of financial distress consist of, namely, economic failure, which is a condition where income is unable to cover all costs, including the company's capital costs. Then, business failure (company bankruptcy) is a condition where a company must end all business activities to minimize the amount of losses to its creditors. Furthermore, technical insolvency is a condition where a company fails to fulfill its obligations. Apart from that, insolvency in bankruptcy is a condition where the book value of all liabilities is more than the market value of assets. Finally, legal bankruptcy (judicial bankruptcy) is a situation where a

Khairunnisa Br Manurung<sup>1</sup>, Rina Br Bukit<sup>2</sup>. Parapat Gultom<sup>3</sup>.

company is declared legally bankrupt (Gamayuni, 2011). Based on the annual financial reports published on the Indonesia Stock Exchange (BEI), these transportation subsector companies have each experienced negative growth in terms of losses incurred by the company in certain periods, as seen in Table 1.1:

Table 1.1. Profit/Loss Fluctuation Data for Several Transportation Sub-Sector Companies 2019-2022 (In Rupiah)

		is avaa (in itu)	, idii,	
KODE PERUSAHAAN	2019	2020	2021	2022
BULL	23,269,848	37,761,993	-230,918,905	-43,384,280
CMPP	-	-	-	1,646,936,950,638
DEAL	157,368,618,806	2,754,589,873,561	2,337,876,178,035	
	-146,699,139	-51,690,228,917	-28,407,859,735	-13,078,717,479
GIAA	6,457,765	-2,476,633,349	-4,174,004,768	3,736,670,304
HELI	22,186,962,539	6,618,117,086	3,450,833,932	-86,113,836,298
HITS	13,142,179	7,311,782	-12,909,706	11,283,293
KJEN	260,143,093	-1,681,187,095	-1,840,302,631	-94,102,528
LEAD	-8,546,695	-2,692,376	-2,654,887	-5,988,228
LRNA	-6,857,140,631	-43,027,059,389	-26,466,832,753	-21,311,924,827
MIRA	-3,222,370,200	-18,218,177,373	-13,195,658,734	-31,352,237,717
PORT	-9,546,728	-70,745,370	-83,115,147	16,968,864
SAPX	39,507,538,392	31,333,543,159	44,750,176,749	831,114,111
SDMU	-36,224,089,028	-43,293,065,964	-9,741,992,566	2,849,909,490
TAMU	-10,197,283	-929,227	-4,427,862	-4,872,917
TAXI	-276,072,942	-53,221,960	188,590,164	-14,903,708
TNCA	2,318,303,630	-3,185,219,424	1,167,612,523	736,080,559
TRUK	948,039,895	-9,242,134,862	-4,928,794,993	-4,266,277,212
WEHA	4,518,959,735	-33,601,480,667	-9,622,676,055	19,938,518,188

Source: Financial Report from the Indonesian Stock Exchange 2019-2022

In Table 1.1, it can be seen that there are several descriptions of companies that experienced fluctuations in profits and losses from 2019-2022. In fact, some of these companies continue to experience losses from the previous year to the next and, among other things, there is a decline in profits in certain years. In table 1.1, the CMPP company continues to show loss figures from 2019 to 2022. In fact, this loss figure continues to be found in the CMPP company's financial report ending in September 2023, reaching -874,203,124,270. Likewise, the LEAD company continues to experience losses of -5,289,168, the MIRA company has a loss of -7,005,348,880, the TAMU company has a loss of -549,190, and the TRUCK company has a loss of -1,813,981,028 in the financial report ending in September 2023. The HELI company has shown fluctuations in decreasing profits in 2020 and 2021 until there were large losses in 2022 until it continued to experience losses of -11,400,374,716 which ended in September 2023.

#### 2.LITERATURE REVIEW

#### A. Agency Theory

According to Dwi Wardoyo, et al, which the author quoted in a journal entitled "Good Corporate Governance from an Agency Theory Perspective". Agency theory or commonly known as agency theory is a concept in economics and management that discusses the relationship between parties, each of whom has a certain interest, while these parties are divided into two categories, namely the principal and the agent. The principal is the party who entrusts tasks and decisions to the agent to represent his interests. An agent is a party who acts on behalf of the

principal to carry out tasks or make decisions. Agency theory is a bond in a contract and involves several principal parties to the agent in carrying out services or providing tasks in the form of delegating authority to make decisions. (Wardoyo et al., 2021).

## B. Signal Theory

Signal theory is a description of a company's prospects that is used as a signal or guide for investors in making a decision. This signal takes the form of information regarding the things that management has gone through and implemented in realizing the wishes of the ruler or owner. This information is very useful and will influence investment decisions from external stakeholders. Signals are very useful for investors and business people, this is because this theory provides an overview, as well as information about the current condition of the company, past conditions, and the future. This information can describe the survival of a company (Wibowo & Febriani, 2023).

## C. Understanding Financial Distress

Financial distress is a condition that reflects the financial performance of a company which is experiencing a downward trend. Financial distress will occur if a company is experiencing financial difficulties and is experiencing difficulties in terms of company finances. This incident was influenced by various factors, one of which was financial difficulties. (Silanno & Loupatty, 2021). Financial distress can be seen from several points of view, namely by looking at financial performance through financial reports which show a downward trend, liquidity difficulties, cash flow problems in the company, layoffs or layoffs of workers, cessation of company dividend payments, inability to pay obligations such as debts. company to various conditions that indicate the company is not in good financial condition and has problems or financial distress.

## D. Leverage

Leverage or solvency ratios are generally useful in measuring the amount of company debt used to finance the company's assets. This ratio level is a company policy and can be used as an information signal to investors. This can replace the company's responsibility by providing information to stakeholders for decision making. Companies that have very large capital compared to debt can be categorized as healthy. If not, it will be categorized as a company experiencing difficulties (Curry & Banjarnahor, 2018).

#### E. Sales Growth

Sales is income obtained through the sale of goods or products, for example services provided or delivery of goods. Sales Growth is a development of sales in the form of an increase or decrease in the number of sales of a product or service which shows a quantity that can be seen between certain periods. By increasing sales of the company's products and services, the company's profits will also increase. Sales growth shows an increase in sales from certain periods such as the following years. The high sales-growth value shows that the company is getting better at sustaining its operations. However, if the sales growth value of a company is lower, the company will be considered bad at running its operations. (Sutra & Mais, 2019).

## F. Operating Capacity

Operating capacity is an efficiency ratio that can be applied in measuring the use of company assets. This ratio can provide an idea of whether the company's assets are efficient and can generate or help sales or not. Assets in a company are important, a good company is a company that uses assets efficiently. Operating capacity is proxied through the asset turnover ratio or total assets turnover. Total asset turnover is a ratio used to measure a company's ability to provide profits through sales of company products or services. A large total asset turnover indicates that the company has efficiency in managing company assets to help sell company products. (Sutra & Mais, 2019).

Khairunnisa Br Manurung<sup>1</sup>, Rina Br Bukit<sup>2</sup>. Parapat Gultom<sup>3</sup>.

## **G. Good Corporate Governance**

According to the OECD or Organization for Economic Co-operation and Development, which the author quoted from Affifah and Muhammad's book, corporate governance is a system used to control or direct business processes in a company. (Affiah and Muhamad, 2018). According to Porter (1991), which the author quotes in Agusti (2013), companies that can be said to be successful are companies that have a strategy in determining the direction of the company. An example is a company determining a strategy in the form of policies by implementing corporate governance principles. Likewise, if a company fails, it could be because it doesn't have a good corporate governance strategy.

## H. Profitability

Profitability is a company's ability to generate company profits. The profitability ratio is a ratio that describes the final result of a set of company policies. Examples include profit margin on sales, return on total assets and so on (Wilujeng & Yulianto, 2020). Profitability is a ratio that can be used to assess a company's ability to realize and maximize profits. This profitability can be calculated using ROE or return on equity. Return on equity is a ratio that describes how capital can return the company's expected profits. In company management, it is necessary to make effective use of business capital by making company expenditure efficient. That way the company will have sufficient funds and save expenses in carrying out company operations.

## 3. IMPLEMENTATION METHOD

## A. Population, Sample, and Sampling Techniques

The population in this research is all transportation subsector companies listed on the Indonesia Stock Exchange. The number of transportation sub-sector companies listed on the Indonesia Stock Exchange (BEI) in 2020-2022 is 48 companies. The sample was determined using a purposive sampling method, namely that the companies that would be sampled in the research were selected with considerations based on certain criteria.

## B. Data collection technique

The data collection technique in this research is by conducting a documentation study. This research uses secondary data, namely in the form of company financial reports for the period 2020-2022 which are published on the Indonesia Stock Exchange and can be obtained via the website www.idx.co.id.

#### 4. RESULTS AND DISCUSSION

#### 4.1 Research result

## A. Data Description

Table 5.1 Results of Descriptive Statistical Analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Leverage	126	.05	3.14	.5353	.45009
Sales Growth	126	84	5.04	.0808	.55593
Operating Capacity	126	.04	2.37	.5399	.44307
Good Corporate Governance	126	.00	.98	.6557	.24222
Profitabilitas	126	58	2.07	.0126	.23578
Financial Distress	126	0	1	.26	.441
Valid N (listwise)	126				

Source: Data processed with SPSS 26, 2024

Based on Table 5.1, the results of descriptive statistical analysis show that the number of observations in this study was 126 samples of transportation subsector companies in 2020-2022. The leverage variable has a minimum value of 0.05 and a maximum value of 3.14. The average value of leverage is 0.5353 with a smaller standard deviation of 0.45009. This illustrates that there is a close distance between each data point and the average value, meaning there is low variation between the minimum and maximum values.

## 4.2 Data Analysis Requirements Testing

## A. Regression Model Feasibility Test

**Table 5.2 Hosmer and Lemeshow Test Results** 

## Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	9.614	8	.293

Source: Data processed with SPSS 26, 2024

Based on Table 5.2, it shows that the chi-square value is 9.614 with a sig value of 0.293. So it can be concluded that H0 is acceptable and the regression model is suitable for use in research because the sig value is 0.293 > 0.05. In the sense that the model is able to predict observation values, the addition of independent variables is able to have a real influence on the model so that the model is considered fit.

## **B.** Assessing the Overall Model (Overall Model Fit)

**Table 5.3 Overall Model Fit Test Results, Block Number = 0** 

lteration History<sup>a,b,c</sup> Coefficients elihood 145.083 - 952 144.910 -1.035 144.910 -1.036 144.910 1.036 a. Constant is included in the model. b. Initial -2 Log Likelihood: 144.910 c. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001

Source: Data processed with SPSS 26, 2024

**Table 5.4 Overall Model Fit Test Results, Block Number = 1** 

lteration History<sup>a,b,c,d</sup>

			Coefficients						
Iteration		-2 Log likelihood	Constant	Leverage	Sales Growth	Operating Capacity	Good Corporate Governance		
Step 1	1	132.606	-1.313	1.182	.090	418	083		
Step 1	2	131.354	-1.448	1.490	.118	700	128		
	3	131.327	-1.439	1.526	.132	784	133		
	4	131.327	-1.438	1.526	.133	788	132		
	6	131.327	-1.438	1.526	.133	788	132		

- a. Method: Enter
- b. Constant is included in the model.
- c. Initial -2 Log Likelihood: 144.910
- d. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Source: Data processed with SPSS 26, 2024

Khairunnisa Br Manurung<sup>1</sup>, Rina Br Bukit<sup>2</sup>. Parapat Gultom<sup>3</sup>.

Based on Table 5.3 and Table 5.4, it can be observed that the -2 Log likelihood value has decreased from block number = 0, namely 144,910 to block number = 1, namely 131,327. This shows that the initial -2 Log likelihood value has a greater value than the final -2 Log likelihood value. So it can be concluded that the hypothesized regression model fits the data and H0 is acceptable.

## C. Multicollinearity Test

Table 5.5 Multicollinearity Test Results

Correlation Matrix

		Constant	Leverage	Sales Growth	Operating Capacity	Good Corporate Governance
Step 1	Constant	1.000	343	.093	412	716
	Leverage	343	1.000	131	.122	172
	Sales Growth	.093	131	1.000	290	.064
	Operating Capacity	412	.122	290	1.000	077
	Good Corporate Governance	716	172	.064	077	1.000

Source: Data processed with SPSS 26, 2024

Based on Table 5.5, it shows that all the values obtained have correlation coefficient values between variables that are smaller than 0.8, so it can be concluded that there are no symptoms of multicollinearity between the independent variables used in the research.

## **D.** Classification Table

**Table 5.6 Classification Table Analysis Results** 

## Classification Table

			Financial I		
	Observed		Non Financial Distress	Financial Distress	Percentage Correct
Step 1	Financial Distress	Non Financial Distress	89	4	95.7
		Financial Distress	29	4	.12.1
	Overall Percentage				73.8

a. The cut value is .500

Source: Data processed with SPSS 26, 2024

Based on Table 5.6, the results of the analysis of the classification table show that 89 companies that are considered non-financial distress or healthy are 89 sample companies or 95.7% that can be accurately predicted by the regression model. In addition, 4 companies or 12.1% of companies experiencing financial distress could be accurately predicted by the regression model. Meanwhile the overall percentage value obtained was 73.8%. In other words, the logistic regression model used can classify the accuracy of the dependent variable by 73.8% to be able to predict whether a company is experiencing financial distress or not. The accuracy of a prediction from a prediction model can be said to be good if the accuracy value exceeds 50% (Ghozali, 2018).

## 4.3 Hypothesis test

## A. Logistic Regression Analysis

Table 5.7 Results of Logistic Regression Analysis
Variables in the Equation

		В	S.E.	Wald	df	Sig.	Exp(B)
Step 1 a	Leverage	1.526	.555	7.570	1	.006	4.600
	Sales Growth	.133	.471	.080	1	.778	1.142
	Operating Capacity	788	.679	1.347	1	.246	.455
	Good Corporate Governance	132	.919	.021	1	.885	.876
	Constant	-1.438	.731	3.865	1	.049	.237

a. Variable(s) entered on step 1: Leverage, Sales Growth, Operating Capacity, Good Corporate Governance.

Source: Data processed with SPSS 26, 2024

Based on Table 5.7, a logistic regression model can be prepared as follows:

Ln ) = -1.438(
$$\frac{\text{FD}}{_{1-\text{FD}}}$$
+ 1.526 LEV + 0.133 SG- 0.788 O.C- 0.132 GCG+ e

The conclusion from the logistic regression equation is as follows:

- 1. The constant value of -1.438 shows that without the influence of the independent variables, namely leverage, sales growth, operating capacity and good corporate governance, the probability of financial distress would be -1.438.
- 2. The leverage variable has a regression coefficient value of 1.526, meaning that if leverage increases by 1 unit, financial distress will increase by 1.526 and vice versa, if leverage decreases by 1 unit, financial distress will decrease by 1.526.
- 3. The sales growth variable has a regression coefficient value of 0.133, meaning that if sales growth increases by 1 unit, financial distress will increase by 0.133 and vice versa, if sales growth decreases by 1 unit, financial distress will decrease by 0.133.
- 4. The operating capacity variable has a regression coefficient value of 0.788, meaning that if operating capacity increases by 1 unit, financial distress will decrease by 0.788 and vice versa, if operating capacity decreases by 1 unit, financial distress will increase by 0.788.
- 5. The good corporate governance variable has a regression coefficient value of 0.132, meaning that if good corporate governance increases by 1 unit then financial distress will decrease by 0.132 and vice versa, if good corporate governance decreases by 1 unit then financial distress will increase by 0.132.

## B. Wald test

# Table 5.8 Wald Test Results Variables in the Equation

		В	S.E.	Wald	df	Sig.	Exp(B)
Step 1 a	Leverage	1.526	.555	7.570	1	.006	4.600
	Sales Growth	.133	.471	.080	1	.778	1.142
	Operating Capacity	788	.679	1.347	1	.246	.455
	Good Corporate Governance	132	.919	.021	1	.885	.876
	Constant	-1.438	.731	3.865	1	.049	.237

a. Variable(s) entered on step 1: Leverage, Sales Growth, Operating Capacity, Good Corporate Governance.

Source: Data processed with SPSS 26, 2024

Based on Table 5.8 the results of the Wald test, the following conclusions are obtained:

1. The leverage variable has a sig value of 0.006 < 0.05, so it can be concluded that leverage has a significant effect on financial distress or H1 is accepted.

Khairunnisa Br Manurung<sup>1</sup>, Rina Br Bukit<sup>2</sup>. Parapat Gultom<sup>3</sup>.

- 2. The sales growth variable has a sig value of 0.778 > 0.05, so it can be concluded that sales growth does not have a significant effect on financial distress or H2 is rejected.
- 3. The operating capacity variable has a sig value of 0.246 > 0.05, so it can be concluded that operating capacity does not have a significant effect on financial distress or H3 is rejected.
- 4. The good corporate governance variable has a sig value of 0.885 > 0.05, so it can be concluded that good corporate governance does not have a significant effect on financial distress or H4 is rejected.

## C. Omnibus Test of Model Coefficient

#### Table 5.9 Omnibus Test Results of Model Coefficient

#### **Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	13.583	4	.009
	Block	13.583	4	.009
	Model	13.583	4	.009

Source: Data processed with SPSS 26, 2024

Based on Table 5.9, the results of the omnibust test of model coefficient show that the chi-square value is 13.583 with a sig value of 0.009 <0.05, so it can be concluded that simultaneously the independent variables in this research are leverage, sales growth, operating capacity, and good corporate governance has a significant effect on the dependent variable financial distress.

### D. Moderating Regression Analysis (MRA)

Table 5.10 Moderating Regression Analysis (MRA) Test Results

		Variable	s in the E	quation			
		B	9.6	Wwitt	(27	Big.	Exp(B)
Step 1"	Leverage	3.247	1.003	10.477	- 1	.001	25,711
	Sales Growth	1,001	.956	1.098	1	295	2.722
	Operating Capacity	- 252	837	.091	1	763	377
	Good Corporate Oosernatics	296	1.212	.060	1	807	1.345
	Promabilities	-5.863	9.335	.394	1	530	.003
	801	15.634	5.066	9.522	1	.002	8161875.379
	182	-3.031	5.468	441	13.	.507	.026
M3 864	M3.	-14,579	15.038	940	- 1	.332	.000
	164	-16,389	10.063	2.663	1	103	.000
	Constant	-2.623	1.004	7.906	- 1	005	.051

 Variable(s) entered on step 1 Leverage, Sales Growth, Operating Capacity, Good Corporate Governance, Profitabilities, M1, M2, M3, M4.

Source: Data processed with SPSS 26, 2024

Based on Table 5.10, a model for moderating regression analysis (MRA) can be prepared as follows:

FD = -2.823 + 3.247 LEV + 1.001 SG - 0.252 OC + 0.296 GCG - 5.863 PT + 15.634 LEV\*PT - 3.631 SG\*PT - 14.579 OC\*PT - 16.389 GCG\*PT + e

The conclusion from the moderated regression analysis (MRA) regression equation is as follows:

- 1. The interaction test between the leverage variable (independent) and the profitability variable (moderation) has a regression coefficient value of 15.634 with a sig value of 0.002 < 0.05 which can be interpreted as significant. So it can be concluded that profitability is able to moderate the relationship between leverage and financial distress or H5 is accepted.
- 2. The interaction test between the sales growth variable (independent) and the profitability variable (moderation) has a regression coefficient value of 3.631 with a sig value of 0.507 > 0.05 which can be interpreted as not significant. So it can be concluded that profitability is unable to moderate the relationship between sales growth and financial distress or H6 is rejected.

- 3. The interaction test between the operating capacity (independent) variable and the profitability variable (moderation) has a regression coefficient value of 14.579 with a sig value of 0.332 > 0.05 which can be interpreted as not significant. So it can be concluded that profitability is unable to moderate the relationship between operating capacity and financial distress or H7 is rejected.
- 4. The interaction test between the good corporate governance variable (independent) and the profitability variable (moderation) has a regression coefficient value of 16.389 with a sig value of 0.103 > 0.05 which can be interpreted as not significant. So it can be concluded that profitability is unable to moderate the relationship between good corporate governance and financial distress or H8 is rejected.

## 5. DISCUSSION

## A. The Effect of Leverage on Financial Distress

The results of logistic regression testing show that leverage has an effect on financial distress with a significance value of 0.006 < 0.05 and a positive coefficient value of 1.526 so that H1 is accepted. The research results show that the higher the level of leverage of a company, the higher the probability of financial distress occurring. If most of the financing of the company's activities has been financed from debt, the result is that the company's obligations will be greater in fulfilling these obligations. This is of course very risky for future payment difficulties because the debt is much greater than the company's total assets. Meanwhile, the principal amount of the loan along with the interest is getting higher, if it is not balanced with good sales proceeds, there will be a potential for failure to occur. If conditions like this cannot be dealt with properly, the momentum of default will trigger financial distress.

#### B. The Influence of Sales Growth on Financial Distress

The results of logistic regression testing show that sales growth has no effect on financial distress with a significance value of 0.778 > 0.05 and a positive coefficient value of 0.133 so that H2 is rejected. A high level of sales growth can also be followed by high growth in the cost of goods sold, resulting in low profits. Therefore, sales growth has not been able to prevent the company from financial distress. If the company cannot control the growth of these costs, the profits generated from sales growth will not be able to cover the costs incurred. As a result, companies tend to use the profits they obtain primarily to cover operational costs in order to maintain the continuity of the company's operations. This could be a bad signal for investors and a trigger that indicates financial distress is occurring.

## C. The Influence of Operating Capacity on Financial Distress

The results of logistic regression testing show that operating capacity has no effect on financial distress with a significance value of 0.246 > 0.05 and a negative coefficient value of 0.788 so that H3 is rejected. Operating capacity has a negative influence but is not significant. This could happen because it refers to the companies used as research samples having such high total debt and being able to show a high level of leverage as well. In this case, it means that most of the assets were obtained from debt, some of which even exceeded 100% of the company's total assets. In other words, the company's ability to utilize its assets to generate sales comes from the management of third party funds, where the company is also required to fulfill the refund of both maturing obligations and interest. So even though the company manages its assets as efficiently as possible, the assets are obtained from debt with such a large amount of debt, this could reflect that the company is indirectly heading towards a condition of financial distress.

## D. The Influence of Good Corporate Governance on Financial Distress

The results of logistic regression testing show that good corporate governance has no effect on financial distress with a significance value of 0.885 > 0.05 and a negative coefficient value of 0.132 so that H4 is rejected. No matter how good good corporate governance is, which is

Khairunnisa Br Manurung<sup>1</sup>, Rina Br Bukit<sup>2</sup>. Parapat Gultom<sup>3</sup>.

characterized by the large amount of institutional ownership, if supervision carried out by institutional investors is not effective, then financial distress will not be avoided (Sunarwijaya, 2017). Centralized ownership can lead to a lack of transparency in the use of funds in the company as well as balance in each existing interest, for example between shareholders and company management and between controlling shareholders and minority shareholders. Share ownership by large institutions is the majority and centralized owner, where majority share ownership will result in reduced transparency in the use of company funds (Rahmania, 2019).

## E. The Effect of Leverage on Financial Distress with Profitability as a Moderating Variable

The results of the moderating regression analysis (MRA) regression test show that profitability is able to moderate the effect of leverage on financial distress with a significance value of 0.002 < 0.05 and a positive coefficient value of 15.634 so that H5 is accepted. Companies that have a high level of leverage will result in the company having difficulty in obtaining maximum profits and influencing creditors' decisions in providing funds. Based on the consequences, if these conditions cannot be handled as well as possible, then slowly the company will be faced with financial problems, namely financial distress which will then lead to bankruptcy.

## F. The Effect of Sales Growth on Financial Distress with Profitability as a Moderating Variable

The results of the moderated regression analysis (MRA) regression test show that profitability is unable to moderate the effect of sales growth on financial distress with a significance value of 0.507 > 0.05 and a negative coefficient value of -3.631 so that H6 is rejected. The higher the sales growth, the higher the cost of goods sold and operational expenses. Sales growth is not necessarily matched by an increase in profits that the company will obtain. Apart from that, taxes related to sales can also be greater if the sales made are too high. The amount of sales growth does not necessarily balance and streamline the burden borne by the company. This can be interpreted in companies with high sales levels but the cost of goods sold, namely expenses directly related to sales, exceeds sales figures. Of course, this also affects the amount of profit obtained by the company. So profitability as a moderating variable is unable to moderate sales growth affecting financial distress.

# G. The Effect of Operating Capacity on Financial Distress with Profitability as a Moderating Variable

The results of the moderating regression analysis (MRA) regression test show that profitability is unable to moderate the effect of operating capacity on financial distress with a significance value of 0.332 > 0.05 and a negative coefficient value of -14.579 so that H7 is rejected. Considering that the majority of this company's assets are financed by debt, it is possible that the profits obtained by the company from sales will be allocated to fulfill the rights of the funding parties that have been obtained by the company, such as paying debts that are due or paying dividends. So the profits earned by the company do not have a direct impact on the company. So the profits obtained by the company are not focused on increasing company assets but are allocated for other operational needs.

# H. The Effect of Good Corporate Governance on Financial Distress with Profitability as a Moderating Variable

The results of the moderating regression analysis (MRA) regression test show that profitability is unable to moderate the influence of good corporate governance on financial distress with a significance value of 0.103 > 0.05 and a negative coefficient value of -16.389 so that H8 is rejected. A low level of profitability can be a bad signal for the company. When during a period a company experiences losses, this can be a turning point for institutional investors who at any time will add or provide large amounts of funds to maintain the company's sustainability. So

profitability is not the main reference for institutional investors' decisions to invest their capital. As explained in the background previously explained, the GIAA company with a negative level of profitability was finally able to survive in better conditions than the previous period after receiving a large injection of trillions in funds from the company's institutional investors.

## 6. CONCLUSION

Based on the results of the research analysis and discussion previously described, the following conclusions are obtained:

- 1. The leverage variable has a significant positive effect on financial distress in transportation subsector companies listed on the Indonesia Stock Exchange in 2020-2022. This shows that the higher the level of leverage of a company, the higher the probability of financial distress occurring.
- 2. The sales growth variable has no effect on financial distress in transportation subsector companies listed on the Indonesia Stock Exchange in 2020-2022. This shows that high or low levels of sales growth have no effect on the high or low probability of financial distress.
- 3. The operating capacity variable has no effect on financial distress in transportation subsector companies listed on the Indonesia Stock Exchange in 2020-2022. This shows that high or low levels of operating capacity have no effect on the high or low probability of financial distress occurring.
- 4. The good corporate governance variable has no effect on financial distress in transportation subsector companies listed on the Indonesia Stock Exchange in 2020-2022. This shows that high or low levels of good corporate governance have no effect on the high or low probability of financial distress occurring.
- 5. The profitability variable as a moderating variable shows that the profitability variable is able to moderate the influence of leverage on financial distress in transportation subsector companies listed on the Indonesia Stock Exchange in 2020-2022.
- 6. The profitability variable as a moderating variable shows that the profitability variable is unable to moderate the influence of sales growth on financial distress in transportation subsector companies listed on the Indonesia Stock Exchange in 2020-2022.
- 7. The profitability variable as a moderating variable shows that the profitability variable is unable to moderate the influence of operating capacity on financial distress in transportation subsector companies listed on the Indonesia Stock Exchange in 2020-2022.
- 8. The profitability variable as a moderating variable shows that the profitability variable is unable to moderate the influence of good corporate governance on financial distress in transportation subsector companies listed on the Indonesia Stock Exchange in 2020-2022.

### 7. LIMITATIONS

In conducting research, there are several limitations in this research, including:

- 1. Profitability as a moderating variable shows a very varied level. Because the sample in the study includes companies with varying amounts of profit, ranging from negative numbers indicating losses to positive numbers indicating the amount of profit earned by the company. In the research analysis carried out, it can be seen that profitability has a long distance between data distribution at each data point in the research sample. If profitability is not so varied, it is possible that research will be able to predict the phenomenon of financial distress in companies more precisely and accurately so that research will produce estimates that are much more representative and applicable.
- 2. In this research, the Altman Z Score model is used and one of the indicators, namely market value of equity, has a value within reasonable limits to be able to predict the probability of financial distress occurring. For each indicator in predicting financial distress, its reasonable value should be considered when conducting research analysis. Because this can affect the research results.

Khairunnisa Br Manurung<sup>1</sup>, Rina Br Bukit<sup>2</sup>. Parapat Gultom<sup>3</sup>.

#### 8. IMPLICATIONS

Based on the results of the research findings, the research implications include two things, namely theoretical and practical implications as follows:

- 1. The Altman Z Score model used in this research can be useful as literature in providing information on predicting the occurrence of financial distress early on both during the COVID-19 pandemic and post-pandemic by using financial reports and annual reports as a medium for decision making and determining appropriate evaluation policies. for the company in the future in order to maintain the continuity of the company's operational activities.
- 2. Companies should give specific attention and proper consideration to the amount of debt they are carrying out so that there is a balance with the total assets owned by the company and funding can be obtained from the company's investors so that the level of leverage does not show a figure that is too large so that there is a chance of financial distress or delisting occurring.

#### **REFERENCES**

- Annisa, VK, Amboningtyas, D., & Gagah, E. (2021). The Effect of Cash Flow, Sales Growth, Leverage and Financial Distress with Profitability as a Moderating Variable (Empirical Study on Food and Baverage Coverage of the Food Register 2016-2020). Journal of Management, 1–12.
- Ardiansyah, Andri & Wahidahwati. (2020). Analysis of the Influence of Liquidity, Leverage, Cash Flow and Institutional Ownership on Financial Distress. Journal of Accounting Science and Research, 9(8), 1-18.
- Cahyono, D. (2019). INTRODUCTION TO BEHAVIORAL ACCOUNTING. Pressindo Campus Park.
- Candrayani, Ni Putu, et al. 2024. The Influence of Ownership Structure, Leverage, Liquidity, Operating Capacity and Sales Growth on Financial Distress. Collection of Accounting Student Research Results (KHARISMA), 6(1), 211-223.
- Curry, Khirstina, & Banjarnahor, E. (2018). Financial Distress in Property Sector Companies Going Public in Indonesia. 1st National Expert Seminar, 207–221.
- Dwiyani, Titik & Purnomo. 2021. The Effect of Institutional Ownership, Liquidity, Leverage on Financial Distress with Profitability as a Moderating Variable. Proceedings of the 2021 ITB AAS Indonesia National Seminar, 4 (1), 44-53.
- Fauziyah, Nur Aprilita. 2019. The Influence of Financial Indicators, Company Size, Institutional Ownership, and Managerial Ownership on Financial Distress in Manufacturing Companies Listed on the Indonesian Stock Exchange 2014-2017. Thesis. Accounting Study Program, Faculty of Economics and Business, Stikubank University. Semarang.
- Fitri, Melsa Aninda & Vaya Juliana Dillak. (2020). Operating Cash Flow, Leverage, Sales Growth Against Financial Distress. Journal of Contemporary Accounting Research, 12 (2), 60-64.
- Gamayuni, RR (2011). Analysis of the Accuracy of the Altman Model as a Tool for Predicting Bankruptcy. Journal of Accounting and Finance, 16(2).
- Ghozali, I. (2016). Multivariate Analysis Applications with (IBM SPSS) (8th ed.). Semarang: Diponegoro University Publishing Agency.
- Ghozali, I. (2018). Multivariate Analysis Application with the IBM SPSS 25 Program. Semarang: Diponegoro University Publishing Agency.
- Giarto, RVD, & Fachrurrozie, F. (2020). The Effect of Leverage, Sales Growth, Cash Flow on Financial Distress with Corporate Governance as a Moderating Variable. Accounting Analysis Journal, 9(1), 15–21. https://doi.org/10.15294/aaj.v9i1.31022
- Handayani, Riska Dwi, et al. 2019. The Effect of Operating Capacity and Sales Growth on Financial Distress with Profitability as a Moderating Variable. SIMBA (MANAGEMENT, BUSINESS AND ACCOUNTING INNOVATION SEMINAR), 1, 137 151.

- Heniwati, E., & Essen, E. (2020). Which Retail Firm Characteristics Impact On Financial Distress? Journal of Accounting and Finance, 22(1), 40–46. https://doi.org/10.9744/jak.22.1.30-36
- Hussein, Said. 2022. The Influence of Institutional Ownership, Firm Size, and Managerial Ownership on Financial Distress in Food and Beverage Companies Listed on the IDX in 2016-2020. Thesis. Faculty of Economics and Business, Mulawarman University, Samarinda.
- Idawati, W., & Wardhana, AK (2021). Analysis of Financial Distress with Profitability as Moderating Variable. Journal of Accounting, 25(2), 222. https://doi.org/10.24912/ja.v25i2.807
- Ikhsan, Arfan, et al. 2014. Business Research Methodology: For Accounting and Management. Bandung: Citapustaka Media.
- Kumajas, LI (2022). Financial Distress of Transportation Companies in Indonesia Before and During the Covid-19 Pandemic. Journal of Information, Taxation, Accounting, and Public Finance, 17(1), 19–38. <a href="https://doi.org/10.25105/jipak.v17i1.8698">https://doi.org/10.25105/jipak.v17i1.8698</a>
- Leonardo & Mulyadi Noto Soetardjo. 2024. Analysis of Determinant Factors of Financial Distress with Profitability as a Moderating Variable. Journal of Accounting Research, 4(2), 162-180
- Mayangsari, R. (2018). The Influence of Capital Structure, Investment Decisions, Managerial Ownership, and Audit Committee on the Value of Companies in Various Industrial Sectors Listed on the Indonesian Stock Exchange for the 2012-2016 Period. Journal of Management Science, 6(4), 477–486.
- Moleong, Lysy Claudia. 2018. The Effect of Real Interest Rate and Leverage on Financial Distress. MODUS, 30(1), 71 86.
- Mulyatiningsih, N., & Atiningsih, S. (2021). The Role of Profitability in Moderating the Influence of Intellectual Capital, Leverage, and Sales Growth on Financial Distress. Journal of Accounting Research (JUARA), 11(1), 55–74. https://doi.org/10.36733/juara.v11i1.2824
- Ningsih, Resty Apriliana Asandimitra, N. (2023). The influence of financial ratios on financial distress in companies in the infrastructure, utilities and transportation sectors with profitability and company size as moderating variables. Management Science, 11(2), 306–322.https://doi.org/10.26740/jim.v11n2.p306-322
- Pillai, H.-ANA-MR (2013). The Impact Of Financial Crisis On UAE Real Estate And Construction Sector: Analysis And Implications. Humanomics, 29(2), 115–135.
- PPN/Bappenas, KBEK (2023). Indonesian and World Economic Development Quarter II 2023. <a href="https://perpustakaan.bappenas.go.id/e-library/">https://perpustakaan.bappenas.go.id/e-library/</a>
- Purba, Saskhia Irving Maest & Muhamad Muslih. 2018. The Influence of Institutional Ownership, Intellectual Capital, and Leverage on Financial Distress (Case Study of Manufacturing Companies Listed on the Indonesia Stock Exchange 2014-2017). Journal of Accounting and Finance, 2 (2), 27 40.
- Premananda, NLPU (2021). PREDICTION OF SUSTAINABILITY OF HOTEL, RESTAURANT AND TOURISM SUB-SECTOR COMPANIES IN THE ERA OF THE COVID-19 PANDEMIC. Cultural Tourism: Scientific Journal of Religion and Culture, 6(2), 153–159.
- Putri, NWKA, & Merkusiwati, NKL (2014). The Influence of Corporate Governance Mechanisms, Liquidity, Leverage, and Company Size on Financial Distress. Udayana University Accounting E-Journal, 7(1), 93–106.
- Radiansyah, B. 2013. The Influence of Operational Efficiency, Operating Cash Flow, and Company Growth in Predicting Financial Distress. Thesis. Accounting Study Program, Faculty of Economics, Padang State University, Padang.
- Rahmania, Thania Febriani Dwi. 2019. The Influence of Leverage, Liquidity, Number of Board of Commissioners, Institutional Ownership on Financial Distress in Manufacturing Companies. Scientific articles. Perbanas College of Economics. Surabaya.
- Ramadhani, AL, & Khairunnisa. (2019). The Influence of Operating Capacity, Sales Growth and Operating Cash Flow on Financial Distress (Empirical Study of Agricultural Sector

Khairunnisa Br Manurung<sup>1</sup>, Rina Br Bukit<sup>2</sup>. Parapat Gultom<sup>3</sup>.

Companies Listed on the Indonesian Stock Exchange for the 2013-2017 Period). Journal of Finance and Accounting Research, 5(1), 75–82.

https://doi.org/10.25134/jrka.v5i1.1883

- Ratna, I., & Marwati, M. (2018). Analysis of Factors That Influence Financial Distress Conditions in Companies Delisted from the Jakarta Islamic Index 2012-2016. Tabarru' Journal: Islamic Banking and Finance, 1(1), 51–62.https://doi.org/10.25299/jtb.2018.vol1(1).2044
- Sari, NKM, & Putri, IG. MAD (2016). Profitability Ability Moderates the Effect of Liquidity and Leverage on Financial Distress. Udayana University Economics and Business E-Journal, 10(5), 3419–3448.
- Santosa, DF, Anggraeni, L., & Pranowo, K. (2020). Determinants of Financial Distress in Retail Subsector Companies on the Indonesian Stock Exchange. Journal of Business and Management Applications, 6(1), 128–141.https://doi.org/10.17358/jabm.6.1.128
- Santoso, B. (2015). Agency (agency): basic principles, theory and problems of agency law. Ghalia Indonesia.
- Saputra, AA (2022). ANALYSIS OF THE INFLUENCE OF THE COVID-19 PANDEMIC CRISIS ON FINANCIAL DISTRESS "(Empirical Study of Transportation Companies Listed on the IDX for the 2019 Quarter 2 and 2020 Quarter 2 Period)." Development Innovation: Research and Development Journal, 10(01), 55–70.https://doi.org/10.35450/jip.v10i01.285
- Silanno, G.L., & Loupatty, L.G. (2021). The Influence of Current Ratio, Debt to Equity Ratio and Return on Assets on Financial Distress in Companies in the Consumer Goods Industry Sector. Journal of Economics, Social & Humanities, 2(7), 85–109.
- Sudana, I. (2015). Corporate Financial Management (Vol. II). Jakarta: Erlangga.
- Sunarwijaya, I Ketut. 2017. The Influence of Liquidity, Leverage, Managerial Ownership, Institutional Ownership on the Possibility of Financial Distress. Mahasaraswati Journal of Management Science, 1(2), pp.1-16.
- Susilowati, PIM, & Fadlillah, MR (2019). Factors That Influence Financial Distress in Manufacturing Companies in Indonesia. Action Journal (Accounting And Information Systems), 4(1), 19–28.
- Sutra, FM, & Rimi, GM (2019). Factors that Influence Financial Distress Using the Altman Z-Score Approach in Mining Companies Listed on the Indonesian Stock Exchange 2015-2017. Journal of Accounting and Management, 16(1), 35–72.
- Wahyuni, SF, Farisi, S., & Jufrizen, J. (2020). Determinants of financial distress in manufacturing sector companies registered on the Indonesian stock exchange. Journal of Economics, Finance and Management, 16(2), 286–298.http://journal.feb.unmul.ac.id/index.php/INOVASI
- Wardoyo, DU, Rahmadani, R., & Hanggoro, PT (2021). Good Corporate Governance in the Perspective of Agency Theory. EKOMA: Journal of Economics, Management, Accounting, 1(1), 39–43.https://doi.org/https://doi.org/10.56799/ekoma.v1i1.25
- Wibowo, LE, & Febriani, N. (2023). IMPLEMENTATION OF AGENCY THEORY, MARKET EFFICIENCY, SIGNAL THEORY AND CONTRACT THEORY IN ACCOUNTING REPORTING AT PT. ESKIMO WIERAPERDANA. Researchgate.
- Wilujeng, R., & Yulianto, A. (2020). Determinants of Financial Distress with Profitability as a Moderating Variable. Journal of Economics and Business Research, 5(1), 90–102.https://doi.org/10.33633/jpeb.v5i1.2746
- Wulandari, F., Burhanudin., & Widayanti, R. (2017). Bankruptcy Prediction Analysis Using the Altman Method (Z-Score) in Pharmaceutical Companies (Case Study of Companies Listed on the Indonesian Stock Exchange 2011–2015). Benefits: Journal of Management and Business, 2(1), 15-27.

Yanuar, Y. (2018). The Influence of Liquidity, Financial Leverage, Operating Income, and Audit Committee Activities on Financial Distress. 1(4), 1–10. <a href="https://doi.org/10.5281/zenodo.1437018">https://doi.org/10.5281/zenodo.1437018</a>

Yohana, Y., & Nyale, MHY (2023). The Influence of Operating Capacity, Sales Growth and Firm Size on Financial Distress. J-MAS (Journal of Management and Science), 8(1), 376.https://doi.org/10.33087/jmas.v8i1.734

https://www.bps.go.id

https://economic.bisnis.com

https://www.garuda-indonesia.com

https://market.bisnis.com

https://setkab.go.id