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The Effect of Profitability, Sales Growth, and Leverage on Financial Distress in Indonesian Retail Companies

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ABSTRACT
Financial distress is a situation in which a company's financial status has declined, potentially leading to bankruptcy. Companies experiencing financial distress often need to restructure their debt, sell assets, and liquidate their operations. This phenomenon is a significant issue for retail companies in Indonesia, particularly in the face of intense competition, shifting consumer behavior, and global economic pressures. Therefore, companies are required to maintain financial stability and improve operational performance to avoid the risk of financial distress and ensure business sustainability amid economic challenges. This study aims to provide empirical evidence on the effects of profitability, sales growth, and leverage on financial distress in retail companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023. The population in this study consisted of retail companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023, with a total research sample of 29 companies, determined using a purposive sampling method. The data was collected and processed using the Microsoft Excel 2019 program and IBM SPSS Statistics 22. The results of this study concluded that (1) profitability has a negative and significant effect on corporate financial distress, (2) sales growth has no effect on corporate financial distress, and (3) leverage has a positive and significant effect on corporate financial distress.

Keywords: Financial Distress, Profitability, Sales Growth, Leverage.
JEL Code: G32, G33, M41.

I. Introduction

Retail plays a crucial role in the Indonesian economy. However, in this increasingly developing era, Indonesia faces a significant problem related to the increasing flow of imported goods flooding the domestic market. Consumers tend to choose goods with lower prices because price is one of the factors that influences a person's decision to buy goods (Deyanputri, 2020). This consumer trend highlights the importance of local retail strategies in creating added value to compete, both in terms of price and product quality. According to Fathurachman (2024), the retail business is an activity that provides added value to the sale of products and services to consumers. In today's digital era, people tend to engage in more online product purchasing activities through e-commerce. This indicates that people are now more inclined to follow market trends and prefer more efficient online shopping methods. The rapid growth of e-commerce in Indonesia is also characterized by the dominance of imported products and is driven by an increase in people's ability to import goods through e-commerce platforms, which enable producers from abroad to market their merchandise to

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local consumers (Deyanputri, 2020). This condition further worsens the competitiveness of local products in an increasingly open and competitive market.

In recent years, several large retail outlets in Indonesia have closed. In 2019, PT Hero Supermarket Tbk closed 26 branches, resulting in the dismissal of 532 employees, as reported by Kusuma (2019) in Rahman et al. (2021). Then, Gunung Agung Stores announced that by the end of 2023, it would permanently close all of its stores. The policy was decided upon in 2020, when PT GA Tiga Belas explained that operational losses per month had increased to the point where it was difficult to maintain the company's business (Putri & Amin, 2024). The problems that occur not only affect sales and operational efficiency but also increase the risk of financial distress, which can cause significant financial difficulties, especially for companies with high debt levels. The initial process of bankruptcy in a business typically occurs when financial performance declines or the company experiences financial distress (Martini et al., 2023). According to Shiu & Wang (2014) and Amoa-Gyarteng (2021), companies experiencing financial distress can face uncontrollable financial burdens and decreased operational performance, which can ultimately lead to bankruptcy. Additionally, the inability of a company to settle its matured debts indicates that the entity is in a financial distress situation (Daniswari & Meiranto, 2023). To assess and determine whether a company is at risk of experiencing financial distress by analyzing the financial information contained in the company's financial statements. According to Sari and Hidayat (2022), financial statement analysis involves examining financial statement items, including balance sheets and profit and loss statements, to gain a deeper understanding of a company's financial condition, which is crucial in making informed decisions.

Financial statement analysis is a crucial component that is integrated with other financial statements, relating to transactions that occur within the company (Mulyana et al., 2024). A commonly used indicator to assess whether a company is at risk of financial distress is through financial ratio analysis. Financial ratios that are often used as a reference include liquidity ratios, solvency ratios, and profitability ratios. Several studies have been conducted to determine the usefulness of financial ratio analysis in predicting financial distress in companies. One of the studies on this prediction is a study conducted by Altman, namely, multiple discriminant analysis. The Altman Z-Score model is a tool used to analyze a company's bankruptcy risk by calculating various ratios and then entering them into a discriminant equation. In this study, financial distress is measured using Altman Z-Score with financial statements as the data source. The Altman Z-Score model for bankruptcy analysis is a tool that can be used to assess the level of company bankruptcy by calculating the values of various ratios and then entering them into a discriminant equation. A Z-score is a score determined from a standardized calculation that shows the level of possible bankruptcy of the company (Isnain et al., 2022). The following is the financial distress data of several retail companies listed on the IDX in 2020-2023, as follows:

Table 1. Financial distress data of several retail companies listed on the IDX in 2020-2023

Company Name	Altman Z-Score			
	2020	2021	2022	2023
PT. Matahari Department Store Tbk (LPPF)	63,44	33,94	61,80	1279,58
PT. Ramayana Lestari Sentosa Tbk (RALS)	0,75	2,39	4,02	2,93
PT. Catur Sentosa Adiprana Tbk (CSAP)	18,39	19,01	19,64	16,26
PT. Sona Topas Tourism Industry Tbk (SONA)	-4,88	-6,94	15,26	7,37
PT. Trikomsel Oke Tbk (TRIO)	-12,17	-9,13	-1,60	-7,09
PT. Electronic City Indonesia Tbk (ECII)	1,89	2,80	3,54	3,45
PT. Mega Perintis Tbk (ZONA)	8,07	10,93	10,13	8,38

Based on Table 1, it can be seen that the results of the z-score analysis on several retail companies indicate that some companies are experiencing very vulnerable financial conditions or even bankruptcy. PT Trikomsel Oke Tbk (TRIO) consistently experienced bankruptcy during the period 2020 to 2023, with a z-score value that was always below 1.81. PT Sona Topas Tourism Industry Tbk (SONA), which recorded a negative z-

ISSN [Online]: 2776-6780

score during the 2020-2021 period, highlighted its vulnerable financial condition. PT Matahari Department Store Tbk (LPPF) has a very high z-score, particularly in 2023, which indicates a robust financial condition. PT Mega Perintis Tbk (ZONA), although it recorded a downward trend in 2023, the z-score value remained in the safe zone throughout the period. This indicates that the financial distress of several retail companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023 exhibits significant variance, with varying results each year. The difference in results reflects differences in financial conditions between companies. This raises important questions about the factors that influence corporate financial distress, particularly in light of rapidly changing market dynamics. According to Fathurachman (2024), cash flow, sales growth, liquidity, and profitability are key metrics that are crucial for evaluating a company's financial health. Giarto & Fachrurrozie (2020) also examine the factors that influence financial distress, namely leverage, sales growth, and cash flow. In this study, researchers used profitability, sales growth, and leverage as factors that are thought to affect the financial distress of retail companies in Indonesia. The selection of these three variables is based on theoretical considerations and previous research findings. Profitability refers to a company's ability to generate profits over a specific period, whereas sales growth represents the annual increase in revenue. Leverage reflects the proportion of a company's debt compared to its equity. By understanding these factors, companies can manage their finances more effectively and better face economic challenges. An analysis of profitability, sales growth, and leverage provides a comprehensive picture of a company's financial strengths and weaknesses.

This information allows management to formulate appropriate policies, such as adjusting financing strategies, setting realistic sales targets, and controlling cost structures. This approach not only helps companies minimize the potential risk of financial distress but also creates a strong foundation for sustainable growth and increased company value in the eyes of investors and other stakeholders. The results of this study are expected to make an important contribution to retail companies in maintaining their financial stability. The information generated can serve as a reference for management in designing effective financial management strategies, thereby minimizing the potential for financial distress. With the proper understanding, companies can be more proactive in anticipating risks, maintaining operational sustainability, and increasing competitiveness amid increasingly competitive market dynamics. Research conducted by Alfiah et al (2024) shows that the results of profitability do not affect financial distress, while liquidity and leverage have a negative and significant effect on financial distress. The research conducted by Giarto and Fachrurrozie (2020) reveals that leverage has a significant positive effect on financial distress, while sales growth has no significant adverse effect on financial distress. In contrast, cash flow has a significant adverse effect on financial distress. This research builds upon existing research. It can be observed that the variables used exhibit different directions of influence and significance on financial distress in companies. In this study, researchers used data spanning four years. The study included 29 companies with 116 observation data.

II. Literature Review and Hypothesis Development

2.1. Signaling Theory

Signal theory was first proposed by Spence (1973) through his study of the labor market, which later evolved and was applied in various disciplines, including economics, accounting, and management. Signal theory helps in explaining the behavior of two parties when they have access to different information. Signal theory is a concept that explains how companies use signals as a medium to communicate information to external parties. The signal is conveyed through financial statement information to external parties. In the world of business and finance, this theory is often employed to understand how companies communicate information to stakeholders, such as investors, through specific actions or decisions. The information provided by the company can be good news or bad news. The signals given by the company to its recipients, both internal parties (stakeholders) and external parties (investors), should be positive. Parties with information asymmetry must be able to provide relevant signals so that investors can utilize them. Investors will then

ISSN [Online]: 2776-6780

respond according to the signal given. This signal is expected to impact investors' perceptions of the company's performance.

2.2. Packing Order Theory

This theory was first proposed by Myers & Majluf (1984). The packing order theory explains that companies prefer to use internal funds and debt rather than equity when there is a need for external funds. Companies with a high level of income tend to reinvest the profits generated by the company and are reluctant to borrow funds from outside sources. The packing order theory explains why companies with high income levels tend to have less debt. This is because the company does not need funds from external parties for its operational activities. Conversely, companies with low income levels tend to use debt for their operational activities. This is because the company requires external funding for its operational activities. According to Myers & Majluf (1984), managers who have more information about the company's prospects than outside investors tend to issue securities that are considered too expensive. In that case, the information asymmetry problem becomes crucial because managers have a better understanding of the company's value and risk compared to investors.

2.3. Financial distress

According to Faldiansyah et al. (2020), financial distress is a stage of financial decline that occurs before bankruptcy or liquidation. In this study, a modified Z-score is used to analyze the level of financial distress in retail companies. The Modified Altman Z-Score can be applied to various types of businesses, both public and private companies (Baliang & Lamaya, 2023). The modified Z-score can be calculated using the following formula:

$$Z = 6.56X_1 + 3.26X_2 + 6.72X_3$$

Interpretation of Z-Score results:

- $Z > 2.99 \rightarrow$ Safe Zone (The company is financially healthy and not at risk of financial distress).
- $1.81 \leq Z \leq 2.99 \rightarrow$ Gray Zone (The company is in an unstable financial condition and has the potential to experience financial distress).
- $Z < 1.81 \rightarrow$ Financial Distress Zone (The company is at high risk of bankruptcy).

2.4. Profitability

According to Lutfita and Takarini (2021), profitability can be interpreted as a measure of a company's ability to generate profits in each period by utilizing its assets and capital. In this study, profitability is measured using the Net Profit Margin (NPM). Susanto and Setyowati (2021) state that NPM is a profitability ratio that measures the percentage of net profit in relation to net sales. The formula is as follows:

$$Net\ Profit\ Margin\ (NPM) = \left(\frac{Net\ Profit}{Revenue}\right) \times 100\%$$

According to signaling theory, profitability reflected in strong financial statements can serve as a positive signal that the company is financially healthy and capable of surviving competition. Conversely, low profitability, especially when accompanied by a lack of transparency, may create uncertainty and reduce market confidence. A previous study by Williem and Ugut (2022), titled Financial Ratio Analysis on Financial Distress, found that profitability, as measured using the NPM, has a significant positive effect on financial distress. Based on these findings, the following alternative hypothesis is proposed:

H1 : Profitability has a significant adverse effect on financial distress.

ISSN [Online]: 2776-6780

2.5. Sales Growth

Sales growth is a ratio that measures a company's ability to achieve targets by comparing year-over-year sales increases (Lestari & Likumahua, 2022). According to Arifin and Nursiam (2024), high sales growth can increase company revenue during a given period, and it is likely to encourage investors to invest in business expansion. Sales growth can be calculated using the following formula:

$$Sales\ Growth = \frac{Current\ Year\ Sales\ -\ Previous\ Year\ Sales}{Previous\ Year\ Sales}$$

According to signaling theory, consistent and increasing sales growth indicates strong demand for a company's products or services. Conversely, stagnant or declining sales growth may place the company under financial pressure. A study by Fathurachman, titled Determinants of Financial Distress in Retail Trade Subsector Companies in Indonesia, found that sales growth has a negative influence on financial distress. Based on these findings, the following alternative hypothesis is proposed:

H2 : Sales growth has a significant adverse effect on financial distress.

2.6. Leverage

According to Mariska et al. (2025), leverage refers to the use of debt by companies to finance or acquire assets. Leverage is important because it provides information about the company's sources of operating capital, such as equity or corporate debt (Wijaya & Suhendah, 2023). In this study, leverage is measured using the Debt-to-Equity Ratio (DER). Sari and Diana (2020) define DER as a ratio that shows the proportion of funds provided by shareholders compared to lenders. The formula is as follows:

$$DER = \frac{Total\ Liabilities}{Total\ Equity}$$

According to the pecking order theory, companies with lower income levels tend to rely on debt for operational activities. High leverage encourages companies to maintain sufficient cash reserves to avoid the high costs of obtaining new debt or issuing equity. A study by Giarto and Fachrurrozie (2020), titled "The Effect of Leverage, Sales Growth, and Cash Flow on Financial Distress with Corporate Governance as a Moderator," found that leverage has a positive influence on financial distress. Based on these findings, the following alternative hypothesis is proposed:

H3 : Leverage has a significant positive effect on financial distress.

2.7. Conceptual Framework

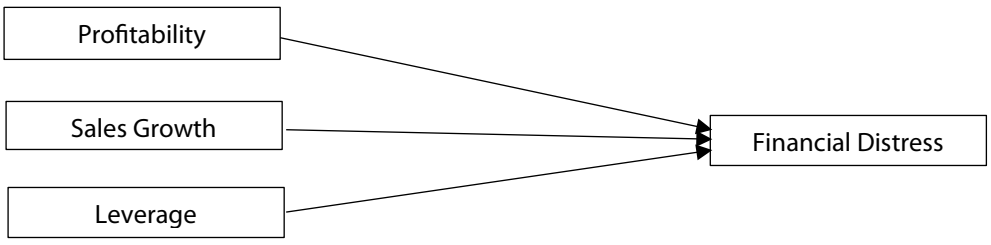

Figure 1. Conceptual Framework

ISSN [Online]: 2776-6780

III. Research Method

The type of research used in this study is a quantitative research method, which emphasizes testing theory through measuring research variables with numbers and analyzing data using statistical procedures (Indriantoro & Supomo, 2018). This quantitative research aims to test and verify the theory, using it deductively as the basis for research findings and problem-solving (Indriantoro & Supomo, 2018).

3.1. Population and Sample

The research population refers to all individuals, objects, or events that are the focus of research (Susanto et al., 2024). In this study, the population consisted of 43 retail companies listed on the Indonesia Stock Exchange between 2020 and 2023. The sample in this study was taken using purposive sampling. Positive sampling is a non-random sampling method where the researcher ensures the selection of illustrations through the use of criteria that match the research objectives, thereby reducing the likelihood of bias (Lenaini, 2021). There are 29 research samples with the following sample selection criteria:

a. Retail companies listed on the Indonesia Stock Exchange from 2020 to 2023.
b. Retail companies that are not listed on the Indonesia Stock Exchange (IDX), consecutively from 2020 to 2023.
c. Retail companies listed on the Indonesia Stock Exchange (IDX) that do not publish or provide financial reports from 2020 to 2023.
d. Retail companies that do not use rupiah (Rp).

3.2. Types and Sources of Data

The type of data used in this study is documentary data. Documentary data is a type of research data that includes invoices, journals, letters, minutes, memos, or reports (Indriantoro & Supomo, 2018). This research data is in the form of financial statements from retail companies listed on the Indonesia Stock Exchange from 2020 to 2023. The data source for this study is secondary data obtained from the official website of the Indonesia Stock Exchange (IDX) at www.idx.co.id, as well as the official websites of the companies studied.

3.3. Data Collection Technique

The data collection technique employed in this research is an archival research method. Archival research is a type of research that utilizes secondary data or archival records, specifically accounting and operational documents collected, recorded, and stored within an organization (Indriantoro & Supomo, 2018). This data collection technique enables researchers to study phenomena or research variables without the need to collect data directly in the field, making it more efficient in terms of both time and cost. Archival research provides an objective picture because the data used have generally been formally documented and can be verified.

3.4. Data Analysis Technique

This research is quantitative, utilizing descriptive statistical formulas and employing hypothesis testing after verifying classical assumptions. The management of test data in this study utilizes the Statistical Package for the Social Sciences (SPSS) 22 software and Microsoft Excel.

ISSN [Online]: 2776-6780

3.4.1. Descriptive Statistics

According to Indriantoro and Supomo (2018), descriptive statistics in research are essentially a process of transforming research data into a tabulated form, making it easier to understand and interpret. The measures used in descriptive statistics include frequency, central tendency (mean, median, mode), dispersion (standard deviation and variance), and correlation coefficient between research variables (Indriantoro & Supomo, 2018). The purpose of this test is to identify and understand the relationship between the variables studied.

3.4.2. Classical Assumption Test

a. Normality Test

The normality test aims to determine whether the data used in the study are typically distributed. In this study, the Kolmogorov-Smirnov statistical test was used (Basuki & Nazaruddin, 2015). If the data are typically distributed, parametric statistical methods can be applied. However, if the data are not normally distributed, an outlier test must be conducted. Outliers are observations that deviate significantly from the average (Basuki & Nazaruddin, 2015). Outlier data can be detected using casewise diagnostics, provided that the standardized residual value is≥ 2.5 (Mangeka & Rahayu, 2020).

b. Multicollinearity Test

According to Basuki and Nazaruddin (2015), multicollinearity refers to the existence of a linear relationship between independent variables in a multiple regression model. If the correlation between independent variables is perfect, then the variables are said to be perfectly multicollinear. To detect multicollinearity, tolerance values and the Variance Inflation Factor (VIF) are examined. The commonly used cut-off values are tolerance > 0.10 or VIF < 10, which indicate the absence of multicollinearity.

c. Heteroscedasticity Test

According to Basuki and Nazaruddin (2015), heteroscedasticity is the presence of unequal residual variances across observations in a regression model. The heteroscedasticity test is conducted to determine whether deviations from the classical assumption exist. A valid regression model must meet the assumption of no heteroscedasticity.

d. Autocorrelation Test

According to Basuki and Nazaruddin (2015), the autocorrelation test is used to determine whether there are deviations from the classical assumption of autocorrelation, which refers to the correlation between residuals in one observation and residuals in another within the regression model. The most commonly used method is the Durbin-Watson (DW) test. If du < DW < 4 – du, it can be concluded that there is no autocorrelation.

3.4.3. Multiple Linear Regression Method

According to Indriantoro and Supomo (2018), multiple linear regression analysis is essentially an extension of the regression method in bivariate analysis, which is generally used to test the effect of two or more independent variables on a dependent variable with an interval or ratio measurement scale, as

ISSN [Online]: 2776-6780

expressed in a linear equation. The results of multiple linear regression analysis provide coefficients for each independent variable in the study. The multiple linear regression equation used in this study is as follows:

$$FD = \alpha + \beta_1 P + \beta_2 SG + \beta_3 LEV + \epsilon$$

Description:

- α = Constant
- β = Regression Coefficient
- FD = Financial Distress
- P = Profitability
- SG = Sales Growth
- LEV = Leverage
- ϵ = Error Term

3.4.4. Hypothesis Testing

a. Partial Test (t-test)

The partial test, also known as the t-test, is used in regression analysis to examine the individual effect of each independent variable on the dependent variable. The decision criteria are as follows:

- If t-count > t-table, then the null hypothesis is rejected.
- If t-count < t-table, then the null hypothesis is accepted.

b. Simultaneous Test (F-test)

The simultaneous test, also known as the F-test, is used to examine the collective effect of all independent variables on the dependent variable. The decision criteria are as follows:

- If the significance value of the F-test < 0.05, then the research model is considered valid and appropriate for testing.
- If the significance value of the F-test > 0.05, then the research model is not considered appropriate for testing.

c. Coefficient of Determination Test (R^2)

The coefficient of determination (R^2) measures the proportion of the variation in the dependent variable that the independent variables in the regression model can explain. The R^2 value ranges from 0 to 1. The closer the value is to 1, the better the model explains the variation in the data. A high R^2 indicates that the regression model can explain most of the variation in the dependent variable.

IV. Results and Discussion

4.1. Descriptive Statistics of Research Variables

Table 2. Descriptive Statistics of Research Variables (N = 149)

Variable	N	Minimum	Maximum	Mean	Std. Deviation
FD	149	-145,15	1279,58	26,8998	127,15084

ISSN [Online]: 2776-6780

Variable	N	Minimum	Maximum	Mean	Std. Deviation
NPM		-17,71	0,68	-0,1482	1,46962
SG		-1,00	219,3	1,6236	17,96669
DER		-21,59	190,31	3,3599	16,82265

Based on Table 2, the descriptive analysis results show that the total number of research data (N) is 149. If the mean is lower than the standard deviation, this indicates a wide data distribution and relatively heterogeneous data. The variables categorized as heterogeneous include financial distress, profitability, sales growth, and leverage.

4.2. Data Analysis

4.2.1. Normality Test

The normality test in this study was conducted using the Kolmogorov-Smirnov statistical test. If the significance level is greater than 0.05, the research data are considered normally distributed. Conversely, if the significance level is less than 0.05, the data are considered not normally distributed.

Table 3. Normality Test Results

One-Sample Kolmogorov-Smirnov	
Unstandardized Residual	
Test Statistic	0,352
Asymp. Sig. (2-tailed)	0,000

Based on Table 3, the significance value is 0.000, which is less than 0.05. This indicates that the research data are not normally distributed. To address this, an outlier test was conducted. Outliers were detected using casewise diagnostics, with the criterion that standardized residual values ≥ 2.5 (Mangeka & Rahayu, 2020).

Table 4. Normality Test Results After Removing Outlier Data

One-Sample Kolmogorov-Smirnov	
Unstandardized Residual	
Test Statistic	0,05
Asymp. Sig. (2-tailed)	0,200

Based on Table 4, a total of 10 outlier data points were identified and removed, resulting in a final sample size of 139. After removing the outliers, the significance value was 0.200, which is greater than 0.05. Therefore, the data are considered to be normally distributed.

4.2.2. Multicollinearity Test

Table 5. Multicollinearity Test Results

Variable	Tolerance	VIF
NPM	1,000	1,000
SG	1,000	1,000
DER	0,999	1,001

ISSN [Online]: 2776-6780

Based on Table 5, the tolerance values are greater than 0.10, and the Variance Inflation Factor (VIF) values are less than 10. Therefore, it can be concluded that in the regression model with financial distress as the dependent variable, there is no indication of multicollinearity among the independent variables.

4.2.3. Heteroscedasticity Test

To determine whether there are symptoms of heteroscedasticity, the White test can be used. The decision-making criterion in the white test is to examine the C2 value. If c^2count < c2 table, then it can be said that heteroscedasticity does not occur. However, if c2count > c2 table, then it can be said that heteroscedasticity occurs.

Table 6. Heteroscedasticity Test Results (White Test)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,180a	0,033	-0,019	11.28575

Source: Data processed, June 2025

Based on Table 6, it can be seen that the R-squared value is 0.033, and the research sample size is 139. Therefore, the c2 value is calculated as follows: 139 x 0.033 = 4.587. The df value is df = 139 - 1 = 138. Based on the chi-square table, the c2 table value with df = 138 is 14.06714. Therefore, it can be concluded that there are no symptoms of heteroscedasticity, as the condition is met: 4.587 (c^2count) < 14.06714 (c^2 table).

4.2.4. Autocorrelation Test

Table 7. Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,863a	0,745	0,740	38,21450	1,907

Source: Data processed, June 2025

Based on Table 7, it can be seen that the DW value is 1.907, with dL and dU values of 1.6791 and 1.7672, respectively. The results show dU (1.7672) < DW (1.907) < 4 - Du (1.7672). So it can be concluded that there is no autocorrelation in this study.

4.3. Multiple Linear Regression

Table 8. Multiple Linear Regression Analysis Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11,175	3,331		3,355	0,001
	X1	-0,937	9,899	-0,004	-0,095	0,025
	X2	3,203	0,175	0,797	18,334	0,000
	X3	1,509	0,188	0,348	8,015	0,000

Based on the results shown in Table 8, the multiple linear regression equation can be formulated as follows:

$$FD = 11.175 - 0.937NPM + 3.203SG + 1.509DER + \epsilon$$

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Based on the equation model, the constant coefficient value is 11.175, which means that the independent variables that affect financial distress, namely profitability, sales growth, and leverage, are zero, so the value of financial distress has reached 11.175. The Net Profit Margin (NPM) coefficient value of -0.937 shows a negative value. This indicates that a 1% decrease in profitability will increase the value of financial distress by -0.937. The coefficient value of Sales Growth (SG) is 3.203, indicating a positive value. This indicates that every time there is a 1% increase in SG, the value of financial distress increases by 3.203. The coefficient value of the Debt-to-Equity Ratio (DER) of 1.509 indicates a positive value. This indicates that a 1% increase in DER results in a 1.509% increase in the value of financial distress.

4.4. Hypothesis Test

4.4.1. Partial Test (t-test)

Based on Table 8, the NPM coefficient has a negative value of -0.937 with a t-count of -0.095 and a significance value of 0.025 < 0.05. These results indicate that profitability has a negative and significant effect on financial distress as measured by NPM. Therefore, hypothesis H1 is accepted. The SG coefficient has a positive value of 3.203 with a t-count of 18.334 and a significance value of 0.000 < 0.05. These results suggest that sales growth does not have a significant impact on financial distress, as measured by the SG ratio. Thus, hypothesis H2 is rejected. The DER coefficient has a positive value of 1.509 with a t-count of 8.015 and a significance value of 0.000 < 0.05. These results indicate that leverage has a positive and significant effect on financial distress as proxied by DER. Therefore, hypothesis H3 is accepted.

4.4.2. F-test

In this study, the F-test was conducted using the ANOVA (Analysis of Variance) table by referring to the significance value. If the significance value is greater than 0.05, the hypothesis is rejected. Conversely, if the significance value < 0.05, the hypothesis is accepted.

Table 9. F-test Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	576802,818	3	192267,606	131,659	1
	Residual	197146,947	135	1460,348		
	Total	773949,766	138			

Source: Processed Data, June 2025

Based on Table 9, it can be seen that the dependent variable (z-score) has a significance value of 0.000, where 0.000 < 0.05. This indicates that all independent variables simultaneously have a significant effect on the dependent variable. Therefore, it can be concluded that the model is feasible for testing.

4.4.3. Coefficient of Determination Test (R^2)

Table 10. Coefficient of Determination Test Results (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,863a	0,745	0,740	38,21450	1,907

Based on Table 10, the Adjusted R Square (R^2) value is 0.740. This result indicates that the independent variables (profitability, sales growth, and leverage) explain 74% of the variation in financial distress as

ISSN [Online]: 2776-6780

measured by the z-score. In comparison, the remaining 26% is explained by other variables not included in this study.

4.5. Discussion

4.5.1. Effect of Profitability on Financial Distress

Based on the statistical data processing using SPSS 22, the Net Profit Margin (NPM) coefficient is -0.937 with a t-count of -0.095 and a significance value of 0.025 < 0.05. These results indicate that profitability has a negative and significant effect on the financial distress of retail companies listed on the Indonesia Stock Exchange (IDX), as proxied by NPM. Therefore, hypothesis H1 is accepted. The acceptance of H1 proves that profitability has a negative and significant effect on the financial distress of retail companies. According to signaling theory, parties with asymmetric information can use signals to reduce uncertainty and provide indications to other parties. This theory explains how companies utilize financial reports and business strategies to mitigate information asymmetry between management and external stakeholders, thereby enabling more informed decision-making regarding investments and financial policies. Profitability reflected in strong financial statements serves as a positive indicator that the company is financially healthy and capable of withstanding a competitive market. Conversely, if profitability is low and not accompanied by transparent information, it creates uncertainty and reduces investor confidence, ultimately increasing the risk of financial distress. The findings indicate that the lower a company's profitability, the higher its likelihood of experiencing financial distress. Profitability reflects the firm's ability to generate earnings from operational activities. When profitability declines, companies face difficulties in generating sufficient profits to cover operational expenses and financial obligations, which may eventually lead to financial distress. These results are consistent with the findings of William and Ugut (2022), who reported that NPM has a significant impact on financial distress. This suggests that companies with insufficient profitability may be unable to cover operational costs and debt obligations, thus facing a higher risk of financial distress.

4.5.2. Effect of Sales Growth on Financial Distress

Based on the statistical data processing using SPSS 22, the Sales Growth (SG) coefficient is 3.203 with a t-count of 18.334 and a significance value of 0.000 < 0.05. These results indicate that sales growth has no significant effect on the financial distress of retail companies listed on the IDX. Therefore, hypothesis H2 is rejected. The rejection of H2 confirms that sales growth does not have a negative and significant effect on financial distress. This insignificant result suggests that fluctuations in sales growth do not necessarily reflect the company's financial distress condition. Even when sales increase or decrease, such fluctuations alone are not sufficient to trigger financial distress because companies may still fulfill financial obligations through other factors. From the perspective of signaling theory, companies communicate financial statements and business strategies to reduce information asymmetry between management and external parties. These signals are expected to shape investors' perceptions of company performance, including assessments of financial distress risks. In this case, although sales growth shows no significant effect, companies still need to provide clear and transparent financial information so that investors and stakeholders can objectively evaluate the company's condition and prospects. These findings are consistent with Giarto and Fachrurrozie (2020), who reported that sales growth does not significantly affect financial distress. This indicates that changes in sales levels, whether increasing or decreasing, do not directly influence the likelihood of financial distress.

4.5.3. Effect of Leverage on Financial Distress

Based on statistical data processing using SPSS 22, the Debt to Equity Ratio (DER) coefficient is 1.509 with a t-count of 8.015 and a significance value of 0.000 < 0.05. These results suggest that leverage has a positive and significant impact on the financial distress of retail companies listed on the IDX, as measured by

ISSN [Online]: 2776-6780

DER. Therefore, hypothesis H3 is accepted. The acceptance of H3 confirms that leverage has a positive and significant effect on financial distress. According to the pecking order theory, companies prefer to use internal funds first and resort to debt rather than equity when external financing is needed. Firms with relatively low income levels tend to rely on debt to finance operational activities. This is especially true for retail companies, which require fast working capital turnover to maintain inventory, expand distribution networks, and meet fluctuating consumer demand. When revenues decline, these companies are more likely to depend on external funding through debt to sustain operations. This finding is consistent with Giarto and Fachrurrozie (2020), who found that leverage has a positive effect on financial distress. High leverage indicates that companies rely heavily on debt rather than internal funding to finance operations. This reliance increases interest expenses and principal repayment obligations. If revenues are insufficient to cover these fixed costs, the company faces an elevated risk of financial distress.

V. Conclusion

This study aimed to examine the effects of profitability, sales growth, and leverage on the financial distress of retail companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023, using the Altman Z-score as a measure of financial distress. The results indicate that profitability has a negative and significant impact on financial distress, suggesting that higher levels of profitability are associated with a lower likelihood of financial distress. Sales growth, on the other hand, has no significant effect, indicating that fluctuations in sales cannot be used as a direct indicator to assess financial distress. Meanwhile, leverage has a positive and significant effect on financial distress, suggesting that a higher proportion of debt increases the risk of financial difficulties faced by companies. This study is limited to retail companies listed on the IDX during the 2020–2023 period and examines only three independent variables; therefore, the results may differ if applied to other sectors or extended time periods. Future research is recommended to include additional variables such as firm size, liquidity, cash flow, and corporate governance, as well as to expand the sample across sectors and extend the observation period to obtain more comprehensive findings. Theoretically, the findings of this research contribute to the existing literature on the determinants of financial distress, particularly in the Indonesian retail sector. Practically, the results provide valuable insights for company management to focus on increasing profitability and managing capital structure as preventive measures against financial distress. For companies, this study serves as a reference in identifying early indicators of financial distress. For researchers, it provides a deeper understanding of the relationship between profitability, sales growth, and leverage in the context of financial distress, while also strengthening skills in financial analysis and academic writing. Finally, for investors, the findings can be used as a reference in assessing the financial risk of companies before making investment decisions, with profitability and leverage serving as key considerations.

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