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THE EFFECT OF LEVERAGE AND SALES GROWTH ON FINANCIAL DISTRESS WITH COMPANY SIZE AS A MODERATING VARIABLE[5]

The study of financial distress plays an important role in helping investors to determine investments in healthy and unhealthy companies and also as material for company management control in predicting financial distress. Financial distress is also influenced by several factors, including sales growth, level of leverage and company size. This study aims to empirically test leverage and sales growth on Financial Distress with company size as a Moderating Variable. The research method used in this study is quantitative methods using Moderated Regression Analysis (MRA) supported by the IBM SPSS 20 statistical tool. This research uses a sample of 55 manufacturing companies on the Indonesia Stock Exchange for 2016-2019 with 220 observations. The sampling technique was carried out using the purposive sampling method. The research results show that leverage has a negative effect on financial distress, sales growth has no effect on financial distress, company size is able to moderate the effect of leverage on financial distress, and company size is not able to moderate the effect of sales growth on financial distress. Hopefully, this research can contribute to the development of science in the field of financial distress and moderation analysis.
Keywords: Financial Distress; Leverage; Sales Growth; Company Size
JEL: B26; P34

1. Introduction

Financial distress is defined as the final stage in a company's organizational performance decline before facing bankruptcy (Lord et al., 2020). Financial distress is one of the factors that must be considered because it is related to the company's sustainability (Rowland,

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Kasych, Šuleř, 2021). A company must be able to maintain and improve its performance in order to survive in a healthy condition (Wijaya et al., 2021). Avoiding financial distress can be one of the causes of the company going bankrupt. However, the fact is that currently there are still companies in Indonesia that have been declared bankrupt for various reasons. For example, PT Sariwangi Agricultural Estates Agency (Sariwangi AEA) was declared bankrupt by the court after being caught in a fairly large debt in 2018, PT. Mrs Meneer was declared bankrupt in 2017 due to unable to pay a debt of Rp7.04 billion to a number of creditors, and PT Modern Internasional Tbk (MDRN) was declared bankrupt due to operating costs which partly came from debt. Those companies that declared bankrupt means they have experienced the final condition of a decline in performance, namely financial distress, so that they can be threatened with delisting or removal by the Indonesia Stock Exchange (Sari, Permana, 2020; Ramadhan, Raharja, Muhyi, 2022).

Financial distress conditions can ultimately result in companies listed on the Indonesia Stock Exchange (IDX) being delisted. Delisting is defined as the removal of a listed company from trading on the stock exchange (Martinez, Serve, 2017). One type of the companies listed on the IDX is a manufacturing company. The conditions of financial distress can occur in all types of companies, including the manufacturing industry. The manufacturing company is a company with a larger scale than other types of companies (Aslamiah, Karyatun, Digdowiseiso, 2023). The financial distress experienced by manufacturing companies needs to be investigated for their future investment needs, as these companies, being significant national investments, attract considerable attention from investors (Reynolds, Uygun, 2018). Delisting a company from trading on the Indonesia Stock Exchange (IDX) is a significant phenomenon that can have a wide impact, not only on the company itself but also on shareholders, employees and potential investors. Financial distress conditions are often the main cause of delisting and occur when a company is unable to fulfil its financial obligations. Several factors that cause financial distress include poor management, high debt burdens, decreased market demand, and unstable global and local economic conditions (Rogova, 2021).

Some examples of manufacturing companies in Indonesia that have experienced delisting include four companies in the basic industrial and chemical sectors, namely Sorini Agro Asia Corporindo (SOBI) which experienced delisting in 2017, Jaya Pari Steel Tbk and PT. Dwi Aneka Jaya Kemasindo Tbk which experienced delisting in 2018, and PT Sekawan Intipratama Tbk which experienced delisting in 2019. Delisting in manufacturing companies also occurred in consumer goods sector companies, namely Taisho Pharmaceutical Indonesia Tbk which experienced delisting in 2018 and miscellaneous sector companies' industry, namely PT. Sigmagold Inti Perkasa Tbk which experienced delisting in 2019 (Setiawan, 2019).

The economic crisis during the COVID-19 pandemic also experienced financial difficulties for several manufacturing companies in Indonesia (Anugerah, 2021). This condition has a significant impact on the Indonesian economy. In the first quarter of 2020, Indonesia was still able to record economic growth of 2.97%. However, when entering the second quarter, after COVID-19 cases began to be detected in Indonesia, economic growth experienced a drastic decline to 5.32%. At the end of 2020, Indonesia recorded an economic decline of

-2.07%. This economic contraction of -2.07% shows that during the Covid-19 pandemic, the Indonesian economy not only did not grow, but actually experienced a decline (Sari, 2022).

One example of the impact of this crisis can be seen in the UNVR company, which is part of the cosmetics and household equipment manufacturing sub-sector. This company experienced a significant decline in profits due to falling sales in the food and beverage segment. In the first quarter of 2019, this segment only managed to record sales of IDR 3.1 trillion, down around 8.8% compared to the previous year which reached IDR 3.4 trillion. This food and beverage segment contributed 29% to UNVR's total sales. On the other hand, the household needs segment at UNVR still shows growth, although slight, namely 2.7% compared to the previous year. In the first quarter of 2019, sales of this segment reached IDR 7.4 trillion, contributing 71% of the company's total sales (Vidiyanti, Setiono, Ilmiddaviq, 2023).

Delisting has a considerable impact on companies and investors. Delisting can affect the industry in two ways. Firstly, removing company shares from the stock exchange quote list can have a negative effect, eliminating existing and potential investors from the industry. On the other hand, a reduction in the number of firms in an industry can have a positive impact on stock prices (Rogova, 2021). Referring to the above phenomenon, financial distress is still a problem that must be addressed today, given the important role of the manufacturing industry in the Indonesian economy. Financial distress that occurs in the company can be sourced from internal or external factors of the company (Eka Putri, Ariella Putri, 2024).

In the dynamic business world, a company's financial health is a crucial aspect that determines long-term sustainability and success. Financial distress, or financial difficulty, is a condition where a company is unable to fulfill its financial obligations which can lead to bankruptcy or debt restructuring. Understanding the factors that influence financial distress is important for managers, investors and other stakeholders (Haris, Sandra, 2023; Nugroho Agung, Harahap, Nasution, 2024).

One effort that can be made to predict financial distress is by assessing the company's financial performance (Lee, Choi, 2020). Financial performance is shown in the company's financial reports. Financial ratios are one of the most frequently used methods to assess a company's success (Mahzura, Fachrudin, Lubis, 2018). One of the financial ratios that can be used to predict financial distress is the leverage ratio. Leverage is a ratio used by companies to measure the company's ability to pay each of its obligations, both short-term obligations and long-term obligations if the company is liquidated (Lucky, Michael, 2019). The leverage ratio shows the proportion of funding financed with debt. The higher the leverage, the higher the company's dependence on its creditors, so this can trigger financial distress in the company (Arhinful, Radmehr, 2023). On the other hand, sales growth reflects a company's ability to increase revenue through increased sales, which is often considered a positive performance indicator. However, aggressive sales growth can result in increased operational costs and working capital requirements, which in turn can lead to the risk of financial distress if not managed well (Chen, Wang, Zhang, 2019).

Apart from that, sales growth can also be used to predict the occurrence of financial distress (Munawar, Yuniarti, 2020). Sales growth is a ratio used by companies to predict future company growth and reflects the success of implementing investments made by the company

in the previous period (Wulandari, Andini, 2021). Sales growth can cause financial distress because the higher the company's sales growth rate, the company's profits will increase so there is less chance of the company experiencing financial distress problems (Cheiristin, Tio, 2021). Predicting financial distress can also be done using an assessment of company size (Alami, Syafrudin, 2022). Total assets are one of various indicators that can be used to measure company size. A company with a large amount of assets shows a positive relationship with creditors, because it is easier for the company to pay off its obligations in the future (Permatasari, Yuliani, 2023). In addition, company size can play a moderating role in the relationship between leverage, sales growth and financial distress. Large companies tend to have better access to financial resources, broader markets, and the ability to spread risk, thereby reducing the negative impact of leverage and sales growth on financial distress (Sari, Wijaya, 2020; Hidayat, Puspitaningtyas, 2021).

This research is different from previous research which only directly examined the influence of leverage and sales growth on financial distress (Hosea, Siswantini, Murtatik, 2020). This research adds a moderating variable, namely company size (Hidayat, Puspitaningtyas, 2021). Company size as proxied by total assets is used as a moderating variable to investigate whether the size of a company can moderate the influence of leverage and sales growth on financial distress (Aginio Bimantio, Ichsanuddin Nur, 2023).

Research on financial distress in manufacturing companies is very important because these companies attract large investments and act as major contributors to the national economy (Bukhori, Kusumawati, Meilani, 2022). Understanding the factors that cause financial distress can help make better investment decisions, ensure worker welfare, and increase investor confidence (Putra, Kurniawan, 2021). Through in-depth research into the causes and impacts of financial distress as well as strategies to overcome them, manufacturing companies can take preventive steps to avoid delisting and ensure long-term sustainability and growth (Salim, Yanti, 2023).

This research is important because the results of the research can fundamentally contribute to several parties. For companies, this research can be used as an additional reference in improving their financial performance and making other strategies to avoid the occurrence of financial distress. Employee welfare is also at stake when a company faces financial distress, because employment layoffs or salary reductions may occur. This research can help companies take effective preventive measures (Hartanto, Mulyani, 2021). For investors, this research can be used as a model of recommendation in measuring financial distress, assisting in making investment decisions and understanding the signs of financial distress is very important for making wiser investment decisions and reducing potential losses (Putra, Kurniawan, 2021). The last contribution is for academics this research can be used as a reference for conducting further research. Findings from research on financial distress can provide valuable input for policymakers and regulators in establishing policies that support a company's financial stability and health (Yusof, Alhabshee, 2023).

2. Literature Review

2.1 Agency Theory

Agency theory, initiated by Jensen & Meckling (1976), proposes that an agency relationship arises when one or more people (principals) employ another person (agent) to provide a service and subsequently delegate decision-making authority to the agent (Sumartono, Puspasari, 2021). The purpose of agency theory is to explain the separation of interests between the owner and the management of the company (Anam, 2020). Agency theory often results in information asymmetry (Utami, Ghazy and Pasi, 2023). Asymmetric information can lead to distrust and opportunistic behaviour that leads to potential risks (Parker *et al.*, 2018). Agency problems are not only limited to the principal and agent, but also include other parties such as creditors, major shareholders and small shareholders (Zhou, Sun, Zhang, 2021). The types of agency problems consist of principal-agent problems, principal-principal problems, and principal-credit problems (Panda, Leepsa, 2017).

Agency theory designs a work contract that will involve both parties in carrying out services in accordance with the interests of the principal (Simamora, Prabowo, 2023). The principal releases or entrusts his resources to the agent, with the expectation that these resources will be managed by the agent. Management has accountability responsibilities, the first is responsibility for carrying out actions and the second is reporting the results of these actions or in accounting it can be in the form of financial reports provided by management (Zhou, Sun, Zhang, 2021). Information from financial reports can be used as a benchmark for assessing a company's financial condition. If the company carries out operational activities well, the profits obtained by the company will be high and it will avoid financial distress (Putri, Erinos, 2020).

Based on agency theory, the agent decides whether to provide funding from a third party or not. The leverage ratio shows the proportion of funding that is financed by debt. This ratio measures a company's ability to fulfil all its short-term and long-term obligations (Ramadhani, Sulistyowati, 2019). The greater the funding of a company through debt, the more it will result in a company experiencing financial distress (Putri, Erinos, 2020).

Agency theory assumes that if the principal and agent have the same goals, the agent will support and carry out everything ordered by the principal (Anam, 2020). Sales growth is a benchmark that shows the percentage of sales levels from year to year (Putri, 2021). Increased sales growth can provide an overview of profits that have also increased so that the manager's mindset is formed regarding various ways to optimize results (Lee, Choi, 2020). Sales growth can cause agency conflicts which inevitably occur between principals and agents when faced with the problem of maintaining revenue trends and sales trends (Anindya, Yuyetta, 2020).

2.2 Signaling Theory

The signaling theory proposed by Spence (1973) explains the signalling done by management is to reduce asymmetric information. Signal theory is used to explain the reactions of corporate stakeholders to the information. In the organizational context, managers are seen as the signalers who send various signals related to the company's business activities to signal

the recipients such as shareholders and customers (Rahman, Rodríguez-Serrano, Lambkin, 2018). The signalling theory focuses on the intentional communication of positive information as an effort to convey positive organizational attributes, which indicate basic, invisible qualities and can be a powerful expression of organizational behavior and its sub-branches and interaction styles (Nyagadza, Kadembo, Makasi, 2021). Signal theory explains how a company should provide "signals" to users of financial reports (Erawati, Wuarlela, 2022). Signals here can be in the form of promotions or other information that can state that the company is better than other companies (Silaban, Harefa, 2021). Management always tries to disclose private information that is of great interest to investors and shareholders, especially if the information is in the form of good news (Susilawati, 2019). The signal must have significant quality in order to attract the attention of the recipient (Yasar, Martin, Kiessling, 2020).

Signal theory has a relationship to financial distress and leverage (Wang, Zhang, 2021). The relationship between financial distress and leverage in signal theory is that additional debt carried out by a company can be captured by investors as a positive signal. This is because debt can be used for company operational costs or company business expansion (Ross, 2020). However, the increase in debt must be in line with the increase in profits obtained. If the increase in debt by the company is not followed by an increase in profits and the company's total assets are smaller than the total debt, then the company will have difficulty paying off these obligations, giving rise to financial difficulties or financial distress for the company so that this can be perceived as a negative signal by investors (Hosea, Siswantini, Murtatik, 2020).

In addition, signal theory states that increasing sales is an example of a positive signal that can be given (Zhang, Feng, 2023). A company that experiences an increase in sales from this period to the previous period can mean that the company's performance is good. The level of increase in sales of the company indicates that the company is carrying out its operational activities as optimally as possible so that the company can avoid financial distress (Cheiristin, Tio, 2021).

2.3 The Effect of Leverage on Financial Distress

Leverage is a measure of how much a company uses equity and debt to finance its assets. When debt increases, financial leverage increases (Lucky, Michael, 2019). Increasing the leverage will also lead to an increase in the company's chance of experiencing financial distress (Lucky, Michael, 2019). Leverage describes the relationship between company debt and capital as well as assets. If this situation cannot be resolved properly, potential the occurrence of financial distress is getting bigger. The greater the total assets owned by the company, it is hoped that the company will be increasingly capable in pay off future obligations, so the company can avoid financial problems (Dewi, Endiana, Arizona, 2019)

Ratio leverage shows the proportion of funding financed by debt (Lucky, Michael, 2019). The leverage ratio has the benefit of assessing how much of a company's assets are financed by debt (Bahri, Saefullah, Anwar, 2022). A high debt-to-equity ratio (DER) value does not always have a high possibility of financial distress, this is because companies that have high

levels of debt can return their capital and increase company profits (Silanno, Glousa Lera, Loupatty, 2021). Creditors will always monitor and need information about the company's financial condition to ensure that the company can fulfil its obligations when due and the company will try to provide extensive information about the condition of the company (Yudhistira, 2017).

The signalling theory explains how companies use certain signals to communicate important information about their financial condition to investors, creditors and other interested parties in order to overcome the problem of asymmetric information (Yasar, Martin, Kiessling, 2020). Leverage, or the use of debt in a company's capital structure, can act as a signal to investors regarding management's confidence in the company's prospects. Management that believes in a company's future prospects may be more inclined to take on debt, indicating to the market that the company has strong enough cash flow to meet its debt obligations. However, high leverage also increases the risk of financial distress, because debt obligations must be met regardless of the company's financial performance. Therefore, moderate use of leverage can be considered a positive signal, while very high leverage can signal a greater risk of financial distress. In situations where information is uneven between management and investors, leverage signals can help reduce leverage and influence market perceptions and the company's stock price (Hosea, Siswantini, Murtatik, 2020).

This is supported by the results of research by Septiani & Dana (2019); Wangsih et al. (2021); and Silalahi et al. (2018) which state that leverage has a negative effect on financial distress. Based on the explanation and results of the analysis of the development of the hypothesis above, the first hypothesis in this study is:

H1: Leverage has a negative effect on financial distress.

2.4. The Effect of Sales Growth on Financial Distress

Sales growth is a ratio used by companies to predict future company growth as well as reflect the success of implementing investments made by companies in the past period (Yuliani, 2021). The higher the company's sales growth level, the company's profit will increase so that the company is less likely to experience financial distress problems (Wulandari, Andini, 2021). This is because positive sales growth indicates an increase in company performance and if accompanied by effective expense management, the company's profit achievement will be more optimal (Cheiristin, Tio, 2021).

High sales growth can increase the company's revenue from sales that occur during a certain period in the company (Sari, Pujiati, 2023). Agency theory explains that investment decisions and corporate strategy innovation lie with agents, so agents must run the company well in order to increase company growth (Putri, 2021). High sales growth is often considered a positive indicator of company performance, indicating increased market demand and the potential for increased profits. However, in some cases, managers may pursue aggressive sales growth for personal gain, such as increasing bonuses or strengthening their positions, without considering the associated risks. This can lead to excessive spending, inefficient investment, and taking on excessive debt, which in turn can increase the risk of financial distress (Chen, Wang, Zhang, 2019; Lee, Choi, 2020). Therefore, although high sales growth

can be a positive signal, agency theory emphasizes the importance of aligning interests between managers and owners to ensure that the growth strategy implemented does not compromise the company's long-term financial stability (Wang et al., 2021).

This is supported by the research results of Putri (2021) which states that *sales growth* has a negative effect on *financial distress*. Based on the explanation and results of the analysis of the development of the hypothesis above, the second hypothesis in this study is:

H2: *Sales Growth* has a negative effect on *financial distress.*

2.5. Company Size Moderates the Effect of Leverage on Financial Distress

Leverage is a measure of how much a company uses equity and debt to finance its assets. When debt increases, financial leverage increases (Lucky, Michael, 2019). Financial distress is defined as the final stage in the decline in the company's organizational performance before going bankrupt (Lord et al., 2020). The size of the company is measured with the total assets indicator showing that the bigger a company is the greater the assets it has. Assets owned by the company not only come from debt but also include the capital owned by the company (Robitho and Sutrisno, 2018). High leverage values are not always possible the occurrence of financial distress is also high. This is because a company having a high level of debt can still meet the return on capital by purchasing assets and increasing company profits (Aditya Kusuma Wardhana, Wiwi Idawati, 2021).

The signalling theory states that the higher the assets, the higher the assets (Silanno, Glousa Lera, Loupatty, 2021). The company is getting better so that it avoids financial difficulties. According to signalling theory, an action will produce a reaction. Included in It includes stakeholder reactions related to financial conditions. Signalling in financial reports is an action taken by management companies that provides instructions for investors about management prospects and the future of the company (Pattiruhu, Paais, 2020).

Research conducted by Lucky & Michael (2019), Arifin et al. (2021) and Wangsih et al. (2021) states that leverage has a positive effect on financial distress. This shows that the larger a company is funded by debt, the greater the company is experiencing financial distress. Research by Rachmawati & Retnani (2020) and Putri & Mulyani (2019) states that company size has a negative effect on financial distress. This shows that the larger the size of the company, the smaller the tendency to experience financial distress.

H3: Company Size moderates the influence of *Leverage* on *financial distress.*

2.6. Company Size Moderates the Effect of Sales Growth on Financial Distress

Sales growth can be used as an indicator of financial distress (Trisanti, 2020). The larger the size of the company, the greater the sales growth. When a company experiences a high level of sales growth, the greater the operating profit obtained by the company, so the higher the sales growth of a company, the smaller the chance of financial distress (Ramadhani, Sulistyowati, 2019). Thus, company size can moderate the effect of sales growth on financial distress (Ramadhani, Sulistyowati, 2019).

Company size can be seen from several indicators, one of which is total sales (Erawati, Rahmawati, 2022). The greater the total sales, the greater the size of a company. The higher the company's sales growth rate, the smaller the possibility of the company experiencing financial distress (Charisma, Suryandari, 2021). This is in accordance with agency theory which states that sales growth will cause conflicts of interest between shareholders and management, even though shareholders are very happy if sales increase because dividend payments will also increase along with an increase in profits (Sari, Pujiati, 2023).

H4: Company size moderates the influence of Sales Growth on financial distress.

3. Methodology

3.1. Research Design

This research employs a quantitative research method. The population used in this study are all manufacturing sector companies listed on the Indonesia Stock Exchange (IDX) in 2016-2019. The purposive sampling method was used in this study. The data was obtained through the IDX's official website and analyzed using descriptive statistics, classical assumption testing and hypothesis testing. The tools used for classical assumption testing include tests for normality, multicollinearity, heteroscedasticity, and autocorrelation to ensure the validity and reliability of the regression models. Descriptive statistics were used to summarize the basic features of the data, providing simple summaries about the sample and the measures. Hypothesis testing was conducted using multiple regression analysis to examine the relationships between the dependent and independent variables, allowing the researchers to test the proposed hypotheses and draw conclusions based on statistical evidence.

In the economic literature, regression and panel probit/logit models are often used when working with microdata to predict bankruptcy and financial distress. The use of measuring tools such as normality, multicollinearity, heteroscedasticity and autocorrelation tests in this research is to ensure that the data used meets the basic assumptions of the regression model so that the results obtained are more accurate and reliable. The multiple regression analysis used is also a common and powerful method in testing the relationship between dependent and independent variables in economic studies.

The sample criteria used in this research based on the purposive sampling method are as follows:

1. Manufacturing companies listed on the Indonesian Stock Exchange in 2016-2019.
2. Manufacturing companies that publish annual financial reports during the observation period 2016-2019 and can be accessed via the Indonesia Stock Exchange website (www.idx.co.id) or accessed via the company's official website.
3. Manufacturing companies that have complete annual financial reports ending December 31 for the 2016-2019 time period.
4. Manufacturing companies that declare annual financial reports in rupiah and dollars (USD).
5. Manufacturing companies that have complete data and fulfil all variables as required in the research.

3.2. Operational Definition and Indicators of Variables

3.2.1. Financial Distress

Financial distress is the stage of financial decline that occurs in a company before a company experiences bankruptcy or liquidation (Altman et al., 2017). Financial distress is measured using the Altman Z-Score method. The Altman Z-Score formula for a company is:

Z-Score = 0.012. X1 + 0.014.X2 + 0.033.X3 + 0.006.X4 + 0.999.X5

(Source: Altman et al., 2017)

3.2.2. Leverage

Leverage is a funding policy related to a company's decision to finance a company (Mahzura, Fachrudin, Lubis, 2018). The Debt-to-Equity Ratio (DER) is used as the ratio leverage. The formula used is as follows:

Debt to Equity Ratio= (Total Debt)/Capital

(Source: Mahzura et al., 2018)

3.2.3 Sales Growth

Sales growth is a reflection of the company's past investment success (Cheiristin, Tio, 2021). Sales growth is used by the company to predict the company's growth in the future as well as reflect the success of implementing investments made by the company in the past period (Putri, 2021).

The company's sales growth can be measured in the following ways:

Sales Growth= (Sales t-(Sales t-1))/(Sales t-1)

(Source: Putri, 2021)

3.2.4 Company Size

Company size is the scale of the company seen from the total value of the company's assets at the end of the year (Sari, Wijaya, 2020). Company size can be measured by total assets, total sales, share value, and so on (Kalbuana, 2021).

The size of the company in this study is measured by total assets. The formula used is as follows:

Company size = Ln (Total Assets)

(Source: Kalbuana, 2021)

4. Results and Discussion

4.1. Descriptive Statistic

Descriptive statistics are used to show the data statistically. They are an important part of research that is used to describe the basic characteristics of data in the research.

Table 1. Descriptive Statistics

	n Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic
LEV	220	.00	4.19	.8448	.72171
Growth	220	-.51	3.79	.0856	.28883
Size	220	26.32	33.49	29.1221	1.68362
Levsize	220	.04	116.99	24.6898	20.88680
Grsize	220	-14.11	110.01	2.5097	8.38206
FinDistress	220	.34	7.82	1.2488	1.02919
Valid N (listwise)	220				

Table 2 shows a statistical description of the results of the study consisting of the independent variable and the dependent variable. The independent variables are Leverage, Growth, Size, interaction of leverage and size, interaction of growth and size and financial distress. The number of N is 220 observations from a sample of 55 companies on the Indonesia Stock Exchange in 2015-2019. Based on Table 2, it is known that the leverage variable has a minimum value of 0.00 and a maximum value of 4.19. A low leverage value indicates that the company is able to finance its assets using its own capital, while a high leverage value indicates that the company is in an insolvable condition. The average value of the leverage variable shows a result of 0.8448 with a standard deviation of 0.72171. The sales growth variable has a minimum value of -0.51 and a maximum value of 3.79. The average value of the sales growth variable shows a result of 0.0856 with a standard deviation of 0.28883. A standard deviation value that is greater than the average value indicates that the data used in this study is heterogeneous. The size variable has a minimum value of 26.32 and a maximum value of 33.49. The larger the company size, the bigger the company, the greater the opportunity to enter the capital market. The average value of the variable size shows a result of 29.1221 with a standard deviation of 1.68362. The financial distress variable has a minimum value of 0.34 and a maximum value of 7.82. A low financial distress value indicates that the company is less likely to experience bankruptcy, and vice versa. The average value of the financial distress variable shows a result of 1.2488 with a standard deviation of 1.02919. A standard deviation value that is smaller than the average value indicates that the data used in this research is homogeneous.

4.2 Hypothesis Testing Result

Table 2. Hypothesis Testing Results

Variable	Variable Type	Prediction	Predictor Variable		
			Coefficient	T	Sig
Leverage (H1)	Independent	-	-.247	-2.599	.010
Sales Growth (H2)	Independent	-	.263	1.108	.269
Company Size * Leverage (H3)	Moderation	+	-.010	-2.897	.004
Company Size * Sales Growth (H4)	Moderation	+	.009	1.026	.306

The results are as follows:

The leverage variable has a significant effect on financial distress, seen from the value 0.01 significance is smaller than 0.05. The result of the beta number of -0.247 means that if leverage increases by 1 unit, it can increase financial distress by 1 unit **(H1 Supported).** A company that has a level of leverage does not necessarily guarantee that the company will be exposed to financial distress, because a company that has a high leverage value does not necessarily have a high burden so that the profit generated by a company is low, but a high leverage value is not followed by higher burdens so that the company is able to generate high profits and is not exposed to financial distress. Companies with a high level of leverage tend to face a greater risk of financial distress because interest and principal payment obligations must still be met regardless of the company's financial performance. When company revenues decrease or cash flow is insufficient to meet debt obligations, the risk of financial distress increases significantly. Additionally, highly leveraged companies may have difficulty obtaining additional financing, as creditors and investors become more wary of the risk of default. Therefore, although leverage can increase profit potential, management must be careful in managing debt levels to avoid a negative impact on the company's financial stability. The results of this research are in accordance with agency theory which states that creditors will always monitor and need information about the company's financial condition to ensure that the company can fulfill its obligations when they fall due. This shows that the higher the leverage that is well controlled by the company, the better the company will avoid financial distress or financial distress will decrease. The results of this research are in line with research Putu et al. (2017) which shows that leverage has a negative effect on financial distress.

The sales growth variable has a significance value of 0.269, greater than 0.05, which means the sales growth is not significant to financial distress **(H2 Not Supported).** Sales growth has no effect on financial distress because companies have decreased sales growth in recent years but have large total assets, large retained earnings and large current assets so that the company does not experience financial distress. Although sales growth is often considered a positive indicator of company performance, several studies show that its effect on financial distress is not always significant. High sales growth does not always guarantee the company's financial stability, because increased sales can be accompanied by increased operational costs and greater working capital requirements. Additionally, companies with rapid sales growth may face challenges in managing cash flow and liquidity, which could lead to financial difficulties. Therefore, although sales growth can provide a positive signal to the market, its direct impact on financial distress may not be significant without effective management and good financial management strategies (Chen, Wang, Zhang, 2019; Lee and Choi, 2020). The results of this research are not in accordance with agency theory which states that investment decisions and company strategic innovation lie with the agent, so the agent must run the company well in order to increase the company's growth (Putri, 2021). This is in line with the research of Hosea et al., (2020) which states that sales growth has no effect on financial distress.

The variable H3 is a moderating variable resulting from the interaction between leverage and size where the significance number of 0.004 is less than 0.05, the size variable is able to significantly moderate Leverage on Financial distress. The beta value of moderating variable

2 is -0.010, which means that size moderation is negative moderation that significantly weakens the influence of leverage on financial distress **(H3 Supported).** The larger the company size, the smaller the tendency to experience financial distress. The smaller the company's size, the more debt it will have. This is because the smaller the size of the company, the higher the opportunity for growth, so small companies will take out more loans to increase the company's growth opportunities. The greater the debt-funded company, the greater the company will experience financial distress (Junior, Wijaya, 2022). The results of this research are in accordance with signaling theory which states that providing signals in financial reports is an action taken by company management that provides guidance to investors about the company's future management prospects (Pattiruhu, Paais, 2020). The results of this research are in line with research by Mujiani & Wahyu (2020) which shows that company size is able to moderate the effect of leverage on financial distress.

The H4 variable is a moderating variable resulting from the interaction between size and sales growth where the significance number of 0.306 is greater than 0.05, the size variable is not able to significantly moderate the sales growth on financial distress **(H4 Not Supported).** Large companies are not necessarily able to generate large sales high if they company is unable to manage their assets well (Junior, Wijaya, 2022). The results of this research are not in accordance with the underlying theory, namely agency theory which states that sales growth will give rise to a conflict of interest between shareholders and management, even though shareholders are very happy if sales increase because dividend payments will also increase along with increasing profits (Sari, Pujiati, 2023). This is in line with research by Junior & Wijaya (2022) which states that company size is unable to moderate the effect of sales growth on financial distress.

5. Conclusion

Financial distress is defined as the final stage in a company's organizational performance decline before facing bankruptcy. This research examines financial distress with several factors including leverage, sales growth, and company size. Based on the data analysis and discussion that has been described, the conclusions of this research are as follows: Leverage had a negative and significant impact on financial distress. A high DER value does not always mean that a financial crisis will occur. This is due to the fact that businesses with high levels of debt are still able to increase profitability and return on capital. The Sales Growth variable does not significantly affect financial distress. Companies have decreased sales growth in recent years but have large total assets, large retained earnings and large current assets so that the company does not experience financial distress. Size is able to significantly moderate the effect of leverage on financial distress. The smaller the size of the company, the higher the opportunity for growth, so small companies will take out more loans to increase the company's growth opportunities. Size is not able to significantly influence the effect of sales growth on financial distress. Large companies are not necessarily able to generate large sales high if they companies are unable to manage their assets well.

6. Implication, Imitations And Suggestions

6.1 Implication

This research has implications for several parties. For manufacturing companies in Indonesia, this research can contribute to current knowledge and serve as a resource or guide for more solutions to financial difficulties for Indonesian manufacturing companies. For future researchers, research can be used as a reference, benchmark for comparison, reference source and supporting data, and can be used to develop better research by other researchers.

6.2 Limitations and Suggestions

This research has several research limitations and suggestions for future researchers, including: This research only uses a 4-year research period so it is unable to describe the company's long-term conditions. It is hoped that further research can increase the research period so that the research can describe the company's condition in the long term. This research only uses certain financial ratio variables such as leverage, sales growth, and company size so it cannot determine other factors causing financial distress. Future research is expected to use other variables outside financial ratios, such as ownership structure and size of the board of commissioners. It is also recommended that further research expand the scope of research objects not only to manufacturing companies, but also to other companies such as mining, the transportation sector, real estate, and others.

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