



Corporate Governance Mechanism and Financial Ratios on the Indonesia Stock Exchange: How do they Affect Financial Distress?

Siti Nur Hajaroh ^a, Ika Yustina Rahmawati ^{a*},
Wida Purwidiarti ^a and Totok Haryanto ^a

^a Management Study Program, Faculty of Economics and Business, Universitas Muhammadiyah Purwokerto, Indonesia.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJEBA/2024/v24i11213

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/111488>

Original Research Article

Received: 25/10/2023

Accepted: 30/12/2023

Published: 06/01/2024

ABSTRACT

Aims: The purpose of this study was to determine the effect of institutional ownership, board of directors, audit committee, company size, and *sales growth* on financial distress.

Study Design: The population of this study consisted of 41 retail subsector companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2022 period. The total observation data is 164 and obtained 64 data samples that meet the criteria and 100 data samples that do not meet the criteria (Loss, Gray Area, Incomplete variables). This research data comes from the company's annual financial statements.

Methodology: The data collection method is purposive sampling and the analysis technique is model fit test, coefficient of determination test, and logistic regression. Financial distress is calculated using the *Altman Z-Score* calculation, and hypothesis testing is tested using the SPSS 26 analysis tool.

*Corresponding author: E-mail: Ikayustinarahmawati@ump.ac.id;

Results: The results showed that good corporate governance proxied by the board of directors and audit committee has no effect on financial distress, while institutional ownership affects financial distress. Company size variables affect financial distress. While sales growth has no effect on financial distress.

Conclusion: Based on this study, it is known that institutional ownership has an effect on financial distress, meaning that the greater the percentage of institutional ownership will reduce the possibility of the company experiencing financial distress. The board of directors has no effect on financial distress, meaning that the number of directors in a company does not affect the occurrence of financial distress. The audit committee has no effect on financial distress, meaning that the number of audit committee members is not able to reduce the problem of financial distress. Company size has an effect on financial distress, meaning that a higher total asset value owned by company would reduce the probability of financial distress. Sales growth has no effect on financial distress, meaning that the high or low level of sales growth does not reflect that it can be followed by an increase in profits earned by the company. To avoid financial distress, it is done by higher percentage of institutional ownership, as well higher total asset value owned by the company properly.

Keywords: Institutional ownership; board of directors; audit committee; company size; sales growth; financial distress.

1. INTRODUCTION

In the business, a company will experience fierce competition, when this competition occurs, the company is required to improve new strategies to survive in experiencing soaring competition to maintain and create significant profits. When the company cannot adjust and be more aggressive in its implementation, and when it faces continuous losses, it will experience financial difficulties. Financial problems that are not resolved immediately lead to company bankruptcy. The exploration of financial strain is essential as it enables the early examination of a company's financial difficulties, allowing for proactive measures to be implemented in anticipation of factors that may lead to bankruptcy [1].

Financial distress refers to a scenario in which a company undergoes a decline in its financial state, occurring prior to the onset of bankruptcy, (Christine et al., 2019). According to Setyowati (2019), there are three financial conditions that cause companies to experience financial distress, including lack of capital, large interest expenses, and losses. Financial distress is characterized by the lack of financial resources to meet financial obligations by their respective due dates. The company is compelled to halt certain or all of its operations. Consequently, it becomes essential to maintain equilibrium among the three facets to reduce the likelihood of the company encountering financial distress.

The retail sector is one industry that has witnessed a decline or shown signs of financial distress. The industrial development of a country or region is generally progressing from year to year and is increasing in the number of industries and types of industries. However, retail sales in Indonesia, according to Bank Indonesia (BI) contracted in May 2023, both on a monthly and annual basis. The fall in retail sales is expected due to a higher calculation base compared to the previous year. The realization of government spending until the first semester of 2023 only grew 0.9% compared to the realization of spending in the first semester of 2022. The growth of state spending is very low compared to the trend of first semester spending growth in previous periods. As is known, based on BI data, the Retail Sales Index in May 2023 was recorded at 223.5 or on an annual basis (year on year) contracted by 4.5%. The decline occurred in all groups, especially in the clothing subgroup, the food, beverage and tobacco group. As well as cultural and recreational goods in line with the normalization of public consumption (CNBC Indonesia, 2023).

Based on earlier studies, the determinant for predicting financial distress is the correlation of effective corporate governance, measured through factors such as institutional ownership, board of directors, and audit committee. There are other factors that can predict financial distress, namely financial ratios with measurements of company size and sales growth. The good corporate governance factor is thought to affect financial distress. Effective

corporate governance involves the application of a well-structured corporate governance mechanism. As per the guidelines of the Organization for Economic Cooperation and company objectives, provide recommendations for goal attainment, and specify the oversight of company performance. Corporate governance mechanisms can be implemented in companies through structures related to ownership and oversight of the company, Dianty [2]. Maximum implementation of good corporate governance increases financial performance and minimizes the formation of financial distress. Companies using good governance tend not to experience financial difficulties. Conversely, companies using weak or poor governance are able to form companies in greater financial difficulty. Corporate governance systems, mechanisms, and structures enable early identification of financial distress so that companies are able to stay away from dangerous risks [1].

Institutional ownership is thought to be a factor that is an indicator of financial distress. Companies that have institutional ownership are companies that are able to indicate the company's monitoring capabilities. Increased institutional ownership within the company promotes vigilant monitoring activities, driven by the substantial voting power, ultimately influencing the company managerial politics. Institutional ownership can prevent problems between owners and managers by signaling that the company is in good condition or not. Greater institutional ownership enhances the effective utilization of assets, thereby reducing the likelihood of financial distress, (Zatira et al., 2023).

The research results from Lesmana & Damayanti [3]; Khaeria & Kristianti [4]; Destriwanti et al. [5]; Handriani et al. [6]; Prasetya [7]; Wulandari & Purnomo [8]; Nadialista Kurniawan, (2021) indicate that institutional ownership affects a role in influencing financial distress. The findings conducted by Adiyanto [9]; Dianty [2]; Darmiasih et al. [10] indicate that financial distress is not influenced by institutional ownership.

The managerial and day-to-day operations of the company are overseen by the board of directors. The board of directors who work in a company acts as management responsible for determining the direction of policies and strategies for managing the resources owned by the company Ibrahim, ([11]). Disclosure can take the form of the company's annual report, providing an

overview of both corporate governance and situations involving financial distress.

Lesmana & Damayanti [3]; Ibrahim [11]; Alexandra et al. [12]; Ihvan et al. [13]; Amiyatun & Wahyono [14] have corroborated the findings of earlier researchers who asserted that the presence of a directive board has an impact on financial distress. Muafiroh & Hidajat [15]; Prasetya [7]; Amelia et al. [16]; Mujiyanti et al. [17] have concluded that the board of directors does not influence financial distress.

The presence of an audit committee is believed to help prevent financial distress. Establishing an audit committee is a crucial aspect of fostering effective corporate governance. The effectiveness of the audit committee is anticipated to lie in its dedication to maximizing shareholder wealth and preventing top management from pursuing personal interests to the detriment of the company. The inclusion of an audit committee is a strategic measure for the success of a company, representing an endeavor to achieve overall corporate success (Wuryan et al., 2020).

The results of earlier studies by Nursiva & Widyaningsih [18]; Novita & Rohmawati (2020) (Dirman, [19]; Aghniya & Purnomowati [20]; indicate that the audit committee influences financial distress. Contrasting outcomes reported by Marlinah [21]; Indarti et al. [22]; Wuryan et al., (2020), Amelia et al., [16]; Alexandra et al. [12]; Pamungkas et al. [23] suggest that, according to their studies, the audit committee does not impact financial distress.

The company's size serves as an indicator to avert financial distress, reflecting the extent of its assets. A company experiencing positive growth signifies an expanding size, thereby diminishing the likelihood of bankruptcy. In this research, Ln total assets is employed as a metric, indicating that a company with a higher number of assets, is in a more secure condition. This suggests that company is better equipped to withstand the potential challenges of financial distress, Adiyanto [9]. As per Rahayu & Sopian (2020), the size company serves as a metric to categorize institutions using various methods, distinguishing between large and small institutions. It is indicative of the total assets owned by the company. The size company contributes value to stakeholders, including investors and creditors, who are more willing to invest or extend loans to companies to mitigate the risk of financial

challenges, Beby Ratnasari et al. [24]. Typically, the size of a company is gauged through its total assets. Companies with smaller total assets are prone to encountering financial distress, while those with larger total assets signal a level of maturity. At this stage, the company's positive cash flow suggests good prospects over a relatively extend period [25].

The outcome of studies by Alsavina & Finatariyani [26]; Runis et al. [27]; Oktasari [28]; Wangsih et al. [25]; Aini et al. [29]; Handriani et al. [6] indicate a correlation between company size and financial distress. In contrast, divergent conclusions drawn by Adiyanto [9]; Susanto Salim [30]; Diyah et al. (2023) suggest that there is no impact of company size on financial distress.

Another factor signaling the avoidance of financial distress is the growth in revenue or sales. The sales growth ratio serves as a metric for assessing the stability of sales and the company's success in transitioning from one period to the next. Every company aspires to sustain and boost its annual sales, ensuring the ongoing operation of the business. A higher sales growth signifies improved prospects, whereas a decline in sales growth increases the likelihood of the company facing financial distress, Wangsih et al. [25]. Sales growth, as a ratio employed to assess and communicate sales performance, is deemed favorable when its outcome is positive during favorable company conditions. However, the crucial indicator of a thriving company lies in the consistent occurrence of negative values in sales growth, signifying sustained and robust performance. Anticipating the future expansion of a company can be achieved by examining metrics such as revenue growth [1].

The findings conducted by Aini et al. [29]; Amanda & Tasman (2019), Rahayu & Sopian (2020), (Rachmawati & Suprihadi, 2021; Diah & Putri [31]; Elviana & Hapzi Ali [32] indicate a consensus that financial distress is influenced by sales growth. Contrasting outcomes from studies led by Riesta & Septriana [33]; Giarto & Fachrurrozie [34]; Nur Aini Sugiana & Wastam Wahyu Hidayat [35]; Marlinah [21] suggest that there is no impact sales growth on financial distress.

Considering the aforementioned context, it is evident that variations in outcomes exist, reflecting inconsistency in line with the previously

described phenomena. This has sparked the researchers' interest in pursuing additional investigations. In this research, retail subsector firm listed on the Indonesia Stock Exchange (IDX) were utilized. Researchers selected retail subsector companies as the focus of their study due to their awareness, derived from the existing problems outlined in the background. They aim to understand the impact of corporate governance and financial ratios on the likelihood of financial distress within these companies.

2. LITERATURE REVIEW

2.1 Signaling Theory

Signaling theory involves actions initiated by company management to offer indications to investors regarding their assessment of the company's future prospects, (Dirman, [19]). The purpose of signal theory is so that a manager can take action in solving problems, especially financial distress problems that arise in a company. The utilization of signaling theory, through the provision of financial information, serves to diminish the information asymmetry between management and investors. Information obtained from financial reports can assess whether the company is experiencing financial distress or not. The level of investor confidence relies on the nature of the report presented to the company through the dissemination of published financial reports. For instilling confidence in investors, organizations need to furnish transparent, comprehensive, and promptly delivered reports that align with comparable indicators. Investor confidence may diminish in the presence of delays in submitting financial reports [10].

The relationship between signaling theory or signal theory and this research is to provide signals or information carried out by management on the condition of a company. The condition of the company being strong or weak provides useful information to users of external financial statements, especially for creditors and investors for decision making.

2.2 Institutional Ownership

Institutional ownership denotes the percentage of company shares outstanding that is held by institutions. Institutional ownership encompasses holdings by securities firms, insurance companies, banks, investment entities, pension funds, and other institutional investors [36].

According to the guidelines in the minister of finance's regulation, specifically in Article 2 of Law No. 7 of 1992 and PJOK No. 7/03/2016, institutional companies are obligated to uphold customers trust and adhere to the prudential principle.

Incorporating institutional ownership serves as a corporate governance mechanism capable of mitigating conflicts between business proprietors and institutions. This alignment of interests helps safeguard the company from potential financial distress. High institutional ownership can directly make managerial performance better and can prevent financial distress. Increased institutional ownership leads to heightened oversight and administration within the organization, influencing company performance. Consequently, it leads to enhanced effectiveness in deploying corporate assets and help reduce the likelihood of financial distress [12].

The outcomes of these discoveries align with investigations carried out by Lesmana & Damayanti [3]; Khaeria & Kristianti [4]; Destriwanti et al. [5]; Handriani et al. [6]; Prasetya [7]; Wulandari & Purnomo, [8]; Nadialista Kurniawan, (2021) demonstrating the impact of institutional ownership on financial distress.

H1. Institutional ownership affects financial distress.

2.3 Board of Directors

The board of directors comprises individuals employed within the company responsible for overseeing all operational aspects. According to the Financial Services Authority (OJK) regulations, specifically No. 33 / PJOK.04 / 2014, public companies are mandated to establish a board of directors with a minimum of 2 members, designating one as the primary director. Every director will make decisions based on their designated responsibilities and authority within the organization. The board of directors, functioning within a company, serves as the management or managerial entity responsible for overseeing the company's operations [37]. Therefore, the board of directors actively participates in and contributes to the implementation of effective good corporate governance.

As an integral part of the company's structure, the board of directors assumes a vital role in

shaping the company's policies and strategic decisions related to its business operations. The strategy associated with the board of directors requires openness in executing control over the specified entity as defined by the principal. The practice of revealing information helps minimize the imbalance in reports. The mode revealing information can be actualized through the company's yearly report, which includes presenting overview of corporate governance and the status of financial distress [38]. Hence, the board of directors contributes to shaping the occurrence of financial distress.

This is in line with the findings Lesmana & Damayanti [3,11-13,39,40,14] indicating the impact of the board of directors on financial distress.

H2. The board of directors affects financial distress.

2.4 Audit Committee

The Audit Committee, according to the Indonesian Audit Committee Association (IKAI) is described as an independent committee created by the board of commissioners with the purpose of enhancing the functions of the company's board of commissioners, Nilasari [41]. Financial Services Authorization Regulation (PJOK) No. 33 / PJOK.04 / 2014 addressing the audit committee requires that meetings be held at least 1-4 times each month. The audit committee is a committee created by the board of commissioners, functioning with professionalism and independence. It is necessary for the audit committees to comprise multiple members, ensuring the committee's capacity to conduct meetings and exchange viewpoints. This is crucial as each member contributes unique corporate governance expertise and financial knowledge to the committee [19].

Following the principles of signaling theory, financial reports act as a tool for communicating information about company's financial status. Consequently, it is crucial for the internal audit committee to perform its duties diligently, guaranteeing the precise inclusion of information in the financial statement. Therefore, it is expected that the audit committee can proficiently execute its duties in examining financial statements and information to avoid any inaccuracies in the produced financial reports. Having a lower count of audit committees in the

company helps steer the company away from financial distress [36].

This consistent with earlier research findings that suggest the audit committee has a role in affecting financial distress, as evidenced by studies conducted by Nursiva & Widyarningsih [18]; Novita & Rohmawati (2020), Dirman [19] Aghniya & Purnomowati [20].

H3. The audit committee affects financial distress.

2.5 Company Size

Company size describes how much information is contained in a company and how much total assets the company has [42]. The size company is a metric or numerical expression that the company can determine by considering factors like total assets, logarithmic size, ahre value, and comparable parameters. The dimensions of a company can be assessed by various measures, including total assets, sales, and market capitalization. As the total assets, sales, and market capitalization increase, so does the magnitude or size of the company. These three variables are useful for assessing the size of a company as they function as indicators of the company's overall scale. Growing assets imply larger capital investment, heightened sales signify expanded monetary flow, and increased market capitalization indicates an enhanced recognition of the company within the community [43]. Company size can create added value to investors and creditors Amanda & Tasman (2019). The reluctance of investors and creditors to invest or extend credit to the company aids in avoiding financial distress.

The results align with the conclusions put forth by Alsavina & Finatariansi [26]; Runis et al. [27], Oktasari [28]; Wangsih et al. [25]; Aini et al. [29]; Handriani et al. [6] indicating that the size of company plays a role in affecting the probability of financial distress.

H4. Company size affects financial distress

2.6 Sales Growth

Sales growth illustrates that the market responds positively to the products or services provided by the company. Sales is one aspect that affects the achievement of company profits. Positive sales growth indicates an increase in company performance and if accompanied by effective expense management, the company's profit achievement will be optimized [24]. Sales growth, referred to as the increase in sales over successive years, signifies effective strategy execution as the extent of sales growth expands, (Rahma & Lilak, 2021). The company can steer clear of this situation by maintaining a sound financial conditionThe likelihood of this scenario decreases with significant sales growth. In contrast, if there decline in sales growth, the probability of facing financial distress conditions increases.

Research studies have identified a connection between sales growth and financial distress, as evidenced by findings from Aini et al. [29], Amanda & Tasman (2019), Rahayu & Sopian (2020), Rachmawati & Suprihhadi, (2021), Diah & Putri [31]; Elviana & Hapzi Ali [32].

H5. Sales growth affects financial distress

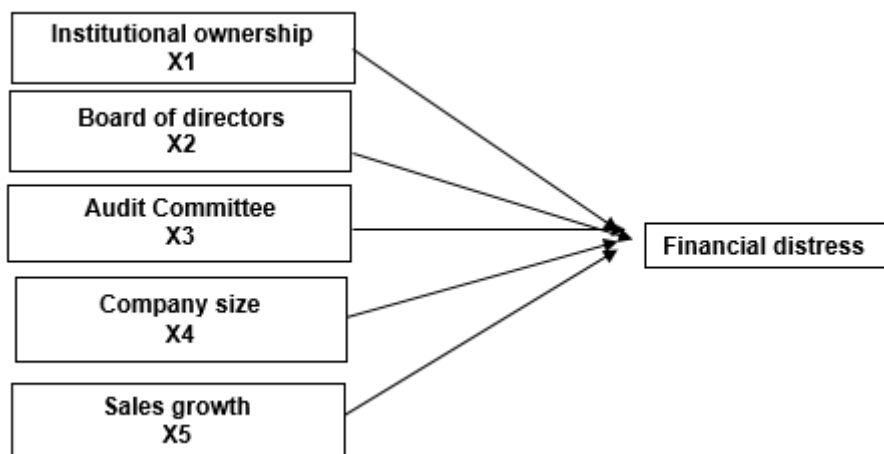


Fig. 1. Framework of thought

3. METHODS AND DATA

This investigation utilized quantitative methodology and concentrates on a set of 41 retail companies publicly traded on the Indonesia Stock Exchange (IDX) throughout the period from 2019 to 2022. The sample of this study is a retail company with purposive sampling technique. Companies whose shares are actively traded on the Indonesia Stock Exchange, among others, are from the retail sector as many as 41 companies multiplied by 4 years of research so as to obtain 164 samples used with the criteria used are as follows in Table 1.

The chosen sampling technique is purposive sampling, which entails selecting samples based on predetermined criteria. For the research 64 data samples that fulfilled the established criteria were collected, the data were sourced through collection techniques and archival methods, specifically by acquiring financial report documents, such as annual reports, from the official website of the Indonesia Stock Exchange (IDX). In this investigation, there are five independent variables and one dependent variable. The independent variables include institutional ownership, board of directors, audit committee, company size, and sales growth. Financial distress is the dependent variable, and it is expressed through the use of a dummy variable.

3.1 Dependent Variable

The dependent variable under examination in this study is financial distress or financial hardship, assessed through the Z-Score analysis method. Z-Score is a multivariable equation used by Altman in predicting the level of bankruptcy [44]. As per Ilyasa (2018) the Altman z-score method for assessing financial distress demonstrates a precision rate of 75%.

$$Z\text{-score} = 6.56 X_1 + 3.26 X_2 + 6.72 X_3 + 1.05 X_4$$

There are 3 criteria used to classify the calculation results of the Altman Z-Score method, namely: $Z\text{-Score} > 2.60 =$ Company in good health $1.1 < Z\text{-Score} < 2.60 =$ Company in gray area zone $Z\text{-Score} < 1.10 =$ Company in financial distress zone.

3.2 Independent Variables

3.2.1 Institutional ownership

Institutional ownership describes the amount of authority of an organization or institution from the private sector or the government over a company. Institutional ownership, which is less than 5%, is considered to have more opportunities to oversee company management. Moreover, institutional stakeholders within the company exhibit heightened concern for the company's long-term gains. This leads to more vigilant oversight of the company's assets serves to diminish the risk of the company encountering financial challenges, Nilasari [45]. According to Wulandari & Purnomo [8] Institutional ownership uses the formula:

$$KI : (\text{Number of institutional shares} / \text{Number of shares outstanding}) \times 100\%$$

3.2.2 Board of directors

The Board of Directors holds a pivotal position in the organizational structure of a company. Enhanced competency among the board of directors in executing their responsibility, especially when considering the intricacies of the company's operations, leads to increased efficiency and potential. This potential encompasses total assets and interactions with entities, ensuring the accessibility of the resources and information. The metric employed in this research involves quantifying the count of the board of directors member period t, inclusive of the CEO [46].

$$DD : \sum \text{board of directors in period } t$$

3.2.3 Audit committee

The audit committee should consist of a minimum of three members, including one independent commissioner. A higher number of audit committee members in the company correlates with a reduced risk of the company facing financial distress. The gauge for the audit committee indicator involves assessing the number of audit committees within the company [19].

$$KA : \sum \text{Audit Committee Period } t$$

Table 1. Criteria sample

No.	Criteria	Number
1	Retail subsector companies listed on the Indonesia Stock Exchange in the 2019-2022 period 41 Companies x 4 years	41 company x 4 year 164 Observations
2	Observations that experienced losses during a certain year	(80)
3	Observations that do not publish financial reports in a certain year	(0)
4	Observations that do not have complete information on related variables in a certain year	(8)
5	The amount of data that falls into the gray area	(12)
	Number of observation	64 Observations

3.2.4 Company size

The size of company is indicative of the company's total assets. Often referred to as the company size, firm size is quantified by taking the logarithm of the total assets of the firm. Large companies are more likely to get loans than SMEs. This is because large companies are more trusted by their creditors than small companies. Larger companies also tend to be more diversified and resistant to bankruptcy risk and more information, minimizing bankruptcy risk and reducing monitoring costs. Discovered that as the company size increases, the likelihood of financial distress decreases, Nilasari [41]. Company size pertains to the entirety of tassets held by the company. As stated by Fitriana & Bahri (2022) the measurement of company size involves:

SIZE: $\ln X$ Total assets

3.2.5 Sales growth

The ratio sales growth functions as a gauge for the success of the company's investments in the previous period and can also act predictor for the company's going viability in the subsequent period, as noted by, Azalia & Rahayu [47].. Aries Heru Prasetyo, (2011) details its calculation using the formula:

SG: $(\text{Sales this year} - \text{Sales last year}) / \text{sales last year}$

4. RESULTS AND DISCUSSION

The analysis listed below has been broken down into descriptive steps in the research. Then the next step is processing with the IBM SPSS 26 application. Each variable is presented briefly with a descriptive analysis test.

According to the findings in Table 1, the descriptive statistical tests were conducted on 64 data points, the results indicate that the institutional ownership variable have average value of 0.6478 and a standard deviation value of 0.2297, this indicates that the average retail company listed on the Indonesia Stock Exchange is only slightly owned by other investors. The lowest institutional ownership value is 0.06 while the highest value is 9.08.

The board of directors variable possesses an average value of 4.6562 with a standard deviation of 1.644 This shows that the average retail subsector company on the Indonesia Stock Exchange in 2019-2022 is mostly owned by other investors (other than directors and their staff). The lowest board of directors value is 2 while the highest value is 8.

The audit committee variable has an average of 2.9375, meaning that the average retail subsector company on the Indonesia Stock Exchange in 2019-2022 is mostly owned by other investors (other than the audit committee). The lowest audit committee value is 2. The highest value obtained is 4 with a standard deviation of 0.3211.

The company size variable as measured by $\ln x$ total assets, the lowest value is 25.71 with total assets of Rp. 145,488,436,584. The highest value obtained is 31.68 with total assets of Rp. 57,445,068,000,000. The mean achieved is 28.9200 accompanied by a standard deviation of 1.40382. Notably, the standard deviation being smaller than the mean suggests homogeneity.

The last variable is sales growth, ranges from minimum of -0.45 to maximum of 1.70. the mean is 0.1464 with a standard deviation of 0.3048. This suggests that the standard deviation

surpasses the mean, revealing suboptimal results due to noteworthy variations in sales growth data across the samples. As a result, the data distribution is not uniform or normally distributed.

The dummy variable for financial distress spans from 0 denoting a positive company, to 1, indicating a negative company. Additionally, it has average (mean) value of 0.8939 and a standard deviation of 0.31.

4.1 Model Feasibility Test

Analyzing the Table 2 provided reveals a Hosmer and Lemeshow's Goodness of Fit value of 0.888 with a corresponding Chi-square probability value of 3.641. Hence, it can deduced that the statistical value of Hosmer and Lemeshow's Goodness of Fit is greater than 0.05. Consequently, the hypothesis cannot be dismissed, indicating the acceptance of the model based on the goodness of fit test. This suggests that the acceptance of the model is well-aligned with the observed data and demonstrates a reliable predictive capability.

4.2 Overall Model Test

Referring to the provided Table 4, there is an evident reduction in the -2 Log likelihood by 20.592. This reduction stems from subtracting the initial -2 Log likelihood minus the final -2 Log likelihood (48,227-27,635) resulting in 20.592.

This signifies that the proposed model align well with the data or exhibits a good fit.

4.3 Regression Determination Coefficient Test (R)²

According to the Table 5, the examination outcomes for the coefficient of determination indicate a *Nagelkerke's R Square* value of 0.520. This value represents the extent to which the independent variables (institutional ownership, board of directors, audit committee, company size and sales growth) can influence the dependent variable accounting for 52% the remaining 48% is attributed to other variables not addressed in this study.

4.4 Logistic Regression Analysis

Logistic regression is utilized to evaluate how the independent variables integrated into the model influence the dependent variable.

Drawing insights from the presented the Table 6, it can be deduced that the obtained output results correspond to the logit values in the following manner:

$$FD = \beta_0 + \beta_1 KI + \beta_2 DD + \beta_3 KA + \beta_4 SIZE + \beta_5 SG$$

$$\ln \frac{FD}{(1-FD)} = 102.121 - 11.753 KI - 0.735 DD + 0.580 KA - 3.002 SIZE - 0.036 SG$$

List 1. Descriptive analysis test result

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Y Financial Distress (FD)	64	,00	1,00	,8750	,33333
X1 Institutional ownership (KI)	64	,06	,92	,6478	,22947
X2 Borad of Directors (DD)	64	2,00	8,00	4,6562	1,64480
X3 Audit Committee (KA)	64	2,00	4,00	2,9375	,30211
X4 Firm Size (SIZE)	64	25,71	31,68	28,9200	1,40382
X5 Sales Growth (SG)	64	-,40	1,70	,1530	,30485

Source: spss data processing results, 2023

Table 2. Model feasibility results

(Hosmer and Lemeshow's Goodness of Fit)

Step	Chi-square	Df	Sig.
1	3,641	8	,888

Source: spss data processing results 26,2023

**Table 3. Overall model fit 0
Overall model fit test results 0 (iteration model 0)**

Iteration History ^{a,b,c}			
Iteration		-2 Log likelihood	Coefficients Constant
Step 0	1	49.781	1.500
	2	48.253	1.885
	3	48.227	1.945
	4	48.227	1.946
	5	48.227	1.946

**Table 4. Overall model Fit 1
Overall fit test results 1 (iteration model 1)**

Iteration History ^{a,b,c,d}								
Iteration		-2 Log likelihood	Coefficients					
			Constant	KI	DD	KA	SIZE	SG
Step 1	1	42.389	13.765	-.900	.042	-.258	-.383	-.330
	2	34.606	28.094	-2.112	.022	-.242	-.824	-.661
	3	30.683	44.162	-3.960	-.105	.123	-1.326	-.860
	4	28.679	62.494	-6.484	-.315	.451	-1.870	-.643
	5	27.812	83.286	-9.327	-.556	.572	-2.465	-.152
	6	27.642	98.131	-11.242	-.699	.598	-2.890	-.023
	7	27.635	101.937	-11.729	-.734	.583	-2.997	-.034
	8	27.635	102.121	-11.753	-.735	.580	-3.002	-.036
	9	27.635	102.121	-11.753	-.735	.580	-3.002	-.036

a. Method: Enter

b. Constant is included in the model.

c. Initial -2 Log Likelihood: 48,227

d. Estimation terminated at iteration number 9 because parameter estimates changed by less than ,001.

Source: data processing spss 26, 2023

Table 5. Coefficient of determination (R)²

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	27,635 ^a	,275	,520

Source: data processing, (SPSS 26)

Table 6. Logistic regression analysis test results

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	KI	-11,753	6,779	3,005	1	,083	,000
	DD	-,735	,607	1,467	1	,226	,479
	KA	,580	3,474	,028	1	,867	1,786
	SIZE	-3,002	1,455	4,256	1	,039	,050
	SG	-,036	3,135	,000	1	,991	,964
	Constant	102,121	49,667	4,228	1	,040	2,242E+44

Source: data processing spss 26, 2023

4.4.1 The effect of institutional ownership on financial distress

The regression coefficient for the institutional ownership variable in this research is -11.753

and a wald test yields a value of 3,005 with a significance value of 0.083 which is greater than 5%. Hence, it can be deduced that institutional ownership does have an impact on financial distress. Thus for H1 is accepted.

This indicates that a higher percentage of institutional ownership is associated with a decrease likelihood of the company facing financial distress. Conversely, a decrease in Institutional Ownership corresponds to an increase in financial Distress. This suggests that the percentage of institutional ownership contributes to enhancing efficiency in optimizing the company's value, facilitated by the oversight exercised on the company's operational activities. These findings align with the outcomes of research conducted by Lesmana & Damayanti [3]; Khaeria & Kristianti [4]; Destriwanti et al. [5]; Handriani et al. [6]; Prasetya [7]; Wulandari & Purnomo [8]; Nadialista Kurniawan, (2021).

4.4.2 Effect of board of directors on financial distress

The variable related to the board of directors in this investigation demonstrates a regression coefficient of -0.735 and a wald test result value of 0.607 with a significance level of $0.226 > 0.05$. Consequently, it is inferred that the board of directors variable does not exert any influence on financial distress. Thus the null hypothesis (H_0) is rejected

The board of directors is one of the parties responsible for the condition of the company. Nevertheless, the company's condition is not consistently influenced by the size of the board of directors. The effectiveness of the board members' work in a company plays a more significant role than the sheer quantity of directors on the board. The number of board of directors has proven ineffective in reducing the likelihood of financial distress. Therefore, in this research, the board of directors does not exert any impact on financial distress.

The findings of the research align with investigations conducted by Muafiroh & Hidajat [15] Prasetya [7]; Amelia et al. [16]; Mujiyanti et al.[17] Consistently, these studies indicate that the board of directors does no influence on financial distress.

4.4.3 Audit committee affects financial distress

The audit committee variable, as revealed by the regression test analysis, exhibits a coefficient value of 0.580 and has a wald test value of 0.028 yielding a significance value of $0.867 > 0.05$. Consequently, it can be deduced that the hypothesis (H_0) is rejected.

This suggests that the audit committee's size does not play a role in mitigating financial distress problems since the effectiveness of the committee's performance is not contingent on the number of its members. The audit committee seems ineffective in reducing or providing a solution to the financial challenges faced by companies in Indonesia. Establishing varying numbers of audit committees may be regarded as a regulation that, in practice, does not yield advantages, as it does not contribute to the optimization of wealth. Consequently, this study refutes H_3 , asserting that the audit committee does not have a significant impact on financial distress

The outcomes of this study research corroborate the findings of studies carried out by Marlinah, ([21]), Indarti et al. [22]; Timur et al. [48]; Amelia et al. [16] Alexandra et al. [12]; Pamungkas et al. [23] all of which assert that the audit committee does not influence on financial distress.

4.4.4 Company size affects financial distress

The variable representing firm size in this research displays a regression coefficient value of -0.036 along a wald test value of 1.455 and a significance value of $0.039 < 0.05$. As a result it is inferred that H_4 is accepted, signifying that the firm size variable indeed impacts financial distress [49-51].

This indicates that utilizing the Ln total assets metric, a company's increased total assets correlate with enhanced capacity to the settle future obligations. Consequently, the company is better positioned to steer clear of financial difficulties of distress. Large companies usually have experience facing various kinds of problems. economic problems, so that if faced with these problems, they will quickly find a solution and survive. The magnitude of a company is gauged by its total assets; when a company holds significant assets, it can readily participate in diversification [52-55].

This study supports the results of research from Alsavina & Finatariyani [26]; Runis et al. [27]; Oktasari, [28]; Wangsih et al. [25]; Aini et al. [29]; Handriani et al. [6] the size of the compaby affects financial distress.

4.4.5 Sales growth affects financial distress

The sales growth variable in aforementioned regression analysis demonstrates a coefficient of -0.036 and the wald test produces a value of

0.000 resulting in a significant value of 0.991 > 0.05. Consequently, the hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted, leading on the conclusion that the sales growth variable does not influence financial distress.

The influence of sales growth on financial distress can be attributed to the uncertainty of a definitive correlation between high or low sales growth and an increase in company's profits. Elevated sales growth may incur substantial expenses, diminishing contribution of generated profits to the company's financial condition well-being. If a company fails to achieve annual sales growth, it may expose itself to the risk of financial distress, as there is concern that the company could incur losses due to limited sales.

This finding concurs with research conducted by Riesta & Septriana, [33], Giarto & Fachrurrozie, ([34]), Nur Aini Sugiana & Wastam Wahyu Hidayat [35]; Marlinah [21] all of which affirm that sales growth has not bearing on financial distress.

5. CONCLUSION

Essentially, this study sought to investigation the impact of institutional ownership, board of directors, audit committee, company size, and sales growth on financial distress within the retail sub-sector companies listed on the Indonesia Stock Exchange during 2019-2020 period. The data analysis results presented above indicate that institutional ownership significantly affect financial distress, this implies that a higher percentage of institutional ownership is associated with a reduce likelihood of the company facing financial distress. On the other hand, the board of directors does not exhibit any effect on financial distress. This indicates that the quantity of directors on a company's board does not contribute to forecasting financial distress. although the board of directors is responsible for the company's well-being. The number of board members does not consistently affect the overall condition of the company. Further more The audit committee does not impact financial distress, indicating that the number of committee members cannot alleviate financial distress problems, this is because the efficiency or the efficacy of the audit committee's is not solely determined by its member size. Conversely, Company size influences financial distress, indicating that a higher the total asset value owned by a company contributes to increased

ability to avoid financial distress. Lastly, Sales growth does not affect financial distress, signifying that the variations in sales growth-whether high or low-do not necessarily lead to corresponding increase in company profits.

This research is anticipated to yielded insights into the financial performance of companies in relation to the occurrence of financial distress. It emphasizes the importance for companies to maximize profits and mitigate the risk of bankruptcy. A key strategy involves increasing assets, as companies with substantial assets can steer clear of financial difficulties and fulfill their debt obligations. The company boosts the quantity of share held by institutions, including those from insurance companies, banks, and other institutional investors. This study has limitations on companies that do not list their variables completely. Therefore, future research is expected to expand the observation year, use different research objects, and use more relevant variables such as macroeconomic ratios (inflation, Gross Domestic Product and so on).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Bahri2 DWMS. Sales Growth to Financial. 2023;7:293-301.
2. Dianty A. The effect of managerial ownership and institutional ownership on firm value. In Search. 2020;19(2):251-262. Available:<https://doi.org/10.37278/insearch.v19i2.336>
3. Lesmana N, Damayanti CR. How Corporate Governance protects Indonesian Companies From Financial Distress. Journal of Business Administration. 2021;10(1):13-22. Available:<https://doi.org/10.14710/jab.v10i1.33523>
4. Khaeria N, Kristianti FT. The impact of corporate governance and liquidity on financial distress with firm size as moderating variable. Indonesian Journal of Management. 2023;23(2):198. Available:<https://doi.org/10.25124/jmi.v23i2.5916>
5. Destriwanti O, Sintha L, Bertuah E, Munandar A. Analyzing the impact of Good Corporate Governance and Financial Performance on predicting Financial

- Distress using the modified Altman Z Score model. American International Journal of Business Management (AIJBM). 2022;5(02):27-36.
6. Handriani E, Ghozali I, Hersugodo H. Corporate governance on financial distress: Evidence from Indonesia. Management Science Letters. 2021;11: 1833-1844. Available:<https://doi.org/10.5267/j.msl.2021.1.020>
 7. Prasetya F. Analysis of the effect of good corporate governance on financial distress moderated by financial performance. Journal of Accounting. 2023;15(1):153-176. Available:<https://doi.org/10.28932/jam.v15i1.6226>
 8. Wulandari T, Purnomo L. Journal of Contemporary Accounting and Business. Journal of Accounting and Business. 2021;21(1):102-115.
 9. Adiyanto Y. The influence of institutional ownership, liquidity, and company size on financial distress (Empirical Study on Property & Real Estate Sub Sector Companies Listed on The Indonesia Stock Exchange 2015 - 2018). International Journal of Economics, Management, Business and Social Science (IJEMBIS). 2021;1(1):111-120. Available:<https://cvodis.com/ijembis/index.php/ijembis>
 10. Darmiasih NWR, Endiana IDM, Pramesti IGAA. The effect of capital structure, cash flow, good corporate governance and company size on financial distress. Kharisma Journal. 2022;4(1):129-140.
 11. Ibrahim R. Corporate governance effect on financial distress: evidence from Indonesian public listed companies. Journal of Economics, Business & Accountancy Ventura. 2019;21(3):415. Available:<https://doi.org/10.14414/jebav.v21i3.1626>
 12. Alexandra C, Lionardi M, William W, Jennefer S, Meiden CM. Literature Study: The effect of good corporate governance factors on financial distress. Owner. 2022;6(1):111-122. Available:<https://doi.org/10.33395/owner.v6i1.536>
 13. Ihvan MZ, Karim NK, Hudaya R. Analysis of the effect of profitability, managerial agency cost and good corporate governance on financial distress (Case Study of Manufacturing Companies Listed on Bei in 2018-2020). Journal of Accounting Student Research. 2022;2(4): 685-697. Available:<https://doi.org/10.29303/risma.v2i4.350>
 14. Amiyatun F, Wahyono. The effect of corporate governance, sales growth, and company size on financial distress. Student's Conference on Accounting and Business. 2022;210-221.
 15. Muafiroh CP, Hidajat T. The effect of good corporate governance and financial ratios on financial distress of banking companies. Ecobisma (Journal of Economics, Business and Management). 2023;10(1): 136-155. Available:<https://doi.org/10.36987/ecobi.v10i1.4012>
 16. Amelia D, Iskandar S, Sari F. Influence of the board of directors, audit committee, managerial ownership on financial distress in companies basic and chemical industry sectors. 2023;444-449.
 17. Mujiyanti M, Ariani KR, Pratama HN. The Effect of Corporate Governance Mechanism and Company Size on Financial Distress. Maximum. 2021;11(2): 67. Available:<https://doi.org/10.26714/mki.11.2.2021.67-74>
 18. Nursiva K, Widyaningsih A. Financial distress in Indonesia: Viewed from governance structure. Journal of Accounting and Finance Research. 2020; 8(2):205-220. Available:<https://doi.org/10.17509/jrak.v8i2.27796>
 19. Dirman A. Financial distress: The impact of institutional ownership, independent commissioners, managerial ownership, and audit committee. International Journal of Management Studies and Social Science Research. 2020;2(4):202-210.
 20. Aghniya, Purnomowati. The effect of audit committee characteristics on financial distress in banking sector companies listed on the indonesia stock exchange in 2018-2020. Jrak. 2023;14(2):29-49.
 21. Marlinah HA. The Effect of financial ratios, audit committee, and corporate governance on financial distress. Business Media. 2023;15(1):103-120. Available:<http://jurnaltsm.id/index.php/MB>
 22. Indarti MGK, Widiatmoko J, Pamungkas ID. Corporate Governance Structures and Probability of Financial Distress: Evidence From Indonesia Manufacturing

- Companies. International Journal of Financial Research. 2020;12(1):174.
Available:<https://doi.org/10.5430/ijfr.v12n1p174>
23. Pamungkas H, Ryad AM, Sayekti FN, Irfian Y. Good corporate governance, company size and accounting conservatism on financial distress in transportation and logistics sector companies listed on bei for the 2017-2021 Period. Journal of Trial Balance. 2023;1(2):18-35.
 24. Beby Ratna Sari, Dirvi Surya Abbas, Hesty Ervianni Zulaecha, Imas Kismanah. The Effect of Liquidity, Sales Growth and Company Size on Financial Distress. Digital Business: Journal of Management Science Publications and E-Commerce. 2022;1(3):70-80.
Available:<https://doi.org/10.30640/digital.v1i3.428>
 25. Wangsih IC, Yanti DR, Yohana Kalbuana N, Cahyadi CI. Influence of leverage, firm size, and sales growth on financial distress. International Journal of Economics, Business and Accounting Research (IJEBAR). 2021;5(4):180-194.
Available:www.ceicdata.com
 26. Alsavina Z, Finatarians E. The effect of company size and financial performance on earnings management. Marginal Journal of Management, Accounting, General Finance and International Economic Issues. 2023;2(3):719-728.
Available:<https://doi.org/10.55047/marginal.v2i3.686>
 27. Runis A, Samsul Arifin D, Masud A, Kalsum U. The influence of liquidity, leverage, company size and profitability on financial distress. International Journal of Business and Social Science Research. 2021;11-17.
Available:<https://doi.org/10.47742/ijbssr.v2n6p2>
 28. Oktasari Dian Primanita. The effect of liquidity, leverage and firm size of financial distress. East African Scholars Multidisciplinary Bulletin. 2020;3(9):293-297.
Available:<https://doi.org/10.36349/easmb.2020.v03i09.002>
 29. Aini WK, Yusnaini Y, Malinda S. Analysis of financial performance, risk and financial distress: studies of retail companies in indonesia during the Covid-19 pandemic. International Journal of Management Studies and Social Science Research. 2022;53-65.
Available:<https://doi.org/10.56293/IJMSSSR.2022.4662>
 30. Susanto Salim AJS. The effect of profitability, leverage, firm size, and sales growth on financial distress. Journal of Accounting Paradigm. 2020;2(1):262.
Available:<https://doi.org/10.24912/jpa.v2i1.7154>
 31. Diah P, Putri W. The effect of operating cash flows, sales growth, and operating capacity in predicting financial distress. International Journal of Innovative Science and Research Technology. 2021;6(1):643-644.
Available:www.ijisrt.com638
 32. Elviana E, Hapzi Ali. Determination of financial distress and stock prices: The effect of financial performance and sales growth (Financial Management Review Literature). Dynasty International Journal of Economics, Finance & Accounting. 2022;3(3):241-252.
Available:<https://doi.org/10.38035/dijefa.v3i3.1323>
 33. Riesta GI, Septriana I. The role of good corporate governance in moderating the effect of financial ratio on financial distress (Study of Consumer Sector Companies Listed on the Indonesia Stock Exchange Over the Period 2018-2020). Journal of Economic and Business Research. 2023;8(1):10-18.
Available:<https://doi.org/10.33633/jpeb.v8i1.6409>
 34. Giarto RVD, Fachrurrozie F. The effect of leverage, sales growth, cash flow on financial distress with corporate governance as a moderating variable. Accounting Analysis Journal. 2020;9(1):15-21.
Available:<https://doi.org/10.15294/aaaj.v9i1.31022>
 35. Nur Aini Sugiana, Wastam Wahyu Hidayat. The effect of operating cash flow, operating capacity and sales growth on financial distress. Indonesian Journal of Business Analytics. 2023;3(3):785-802.
Available:<https://doi.org/10.55927/ijba.v3i3.4418>
 36. Damayanti ND, Kusumaningtiyas R. The Effect of Corporate Governance on Financial Distress in the Infrastructure, Utilities and Transportation Services Company Sector on the Indonesia Stock Exchange for the 2015-2017 Period.

- AKUNESA Accounting Journal. 2020;8(3): 1-9.
37. Senandung Nacita Usman, Risal Rinofah, Alfiatul Maulida. The Effect of Good Corporate Governance on Financial Distress in Manufacturing Companies Listed on the IDX. Collaborative Journal of Science. 2022;5(7):406-413. Available:<https://doi.org/10.56338/jks.v5i7.2593>
 38. Widhiastuti R, Nurkhin A, Susilowati N. The role of financial performance in mediating the effect of good corporate governance on financial distress. Journal of Economia. 2019;15(1):34-47. Available:<https://doi.org/10.21831/economia.v15i1.22927>
 39. Jodjana JJ, Nathaniel S, Rinaningsih R, Pranoto,T. The Effect of Board and Ownership Structure on the Possibility of Financial Distress. Journal of Accounting and Investment. 2021;22(3):581-601. Available:<https://doi.org/10.18196/jai.v22i3.12659>
 40. Kalbuana N, Taqi M, Uzliawati L, Ramdhani D. The Effect of Profitability, Board Size, Woman on Boards, and Political Connection on Financial Distress Conditions. Cogent Business and Management. 2022;9(1). Available:<https://doi.org/10.1080/23311975.2022.2142997>
 41. Nilasari A. The effect of financial performance, risk based capital, company size and macroeconomics on financial distress. Journal of Business Economics and Entrepreneurship. 2021;10(1):55. Available:<https://doi.org/10.26418/jebik.v10i1.44793>
 42. Suryani Putri D, NR E. The effect of financial ratios, company size and agency costs on financial distress. Journal of Accounting Exploration. 2020;2(1):2083-2098. Available:<https://doi.org/10.24036/jea.v2i1.199>
 43. Azzahra AS, Wibowo N. The Effect of Firm Size and Leverage Ratio on Financial Performance in Mining Companies. Journal Wira Ekonomi Mikroskil. 2019;9(1):13-20. Available:<https://doi.org/10.55601/jwem.v9i1.588>
 44. Prihadi T. Financial statement analysis. PT Gramedia Pustaka Utama; 2019.
 45. Nilasari JA. The effect of corporate governance on financial distress in the infrastructure, Utilities and transportation services company sector on the indonesia stock exchange novita dwi damayanti period accounting department, Faculty of Economics, Surabaya State University Rohmawa. 2020;8(3).
 46. Siahaan R, Alexander SW, Pusung RJ. The Effect of Managerial Ownership, Firm Size, and Board Size on Potential Financial Distress in Transportation Companies on the Indonesia Stock Exchange. Journal of EMBA. 2021;9(3):675-684. Available:[file:///C:/Users/User/Documents/SMT 7/Scripton FD/journal for the transportation sector/Influence of Managerial Ownership, Firm Size, and Board of Directors on Potential Financial Distress in Transportation Companies on the Indonesia Stock Exchange.pdf](file:///C:/Users/User/Documents/SMT%207/Scripton%20FD/journal%20for%20the%20transportation%20sector/Influence%20of%20Managerial%20Ownership,%20Firm%20Size,%20and%20Board%20of%20Directors%20on%20Potential%20Financial%20Distress%20in%20Transportation%20Companies%20on%20the%20Indonesia%20Stock%20Exchange.pdf)
 47. Azalia V, Rahayu Y. The Effect of Leverage, Liquidity, Profitability, and Company Size on Financial Distress. Journal of Accounting Science and Research. 2019;86-101.
 48. Timur J, Cawangan U, Sembilan N. 2020;7(3):1803-1818. Available:<http://jssidoi.org/esc/home>
 49. Audit K, Managerial K, Amelia D, Iskandar S, Sari F. Influence of Board of Directors, Basic Industry and Chemical Sector. 2023;0:444-449.
 50. Fitri MA, Dillak VJ. Operating Cash Flow, Leverage, Sales Growth to Financial Distress. Journal of Contemporary Accounting Research. 2020;12(2):60-64. Available:<https://doi.org/10.23969/jrak.v12i2.3039>
 51. Logistics TD, Putri R, Sari E, Pujiati D. On financial distress in companies sector transportation and logistics company size against financial distress in sector companies. 2023;4(5):5369-5393.
 52. Miftahul Ihsan CR, Hendrani A. Detecting financial distress of retail sector companies going public in Indonesia using the grover model. Fair Value: Scientific Journal of Accounting and Finance. 2022;5(4):1746-1753. Available:<https://doi.org/10.32670/fairvalue.v5i4.2615>
 53. Available:<http://journal.unilak.ac.id/index.php/JIEB/article/view/3845%0Ahttp://dspace.uc.ac.id/handle/123456789/1288>
 54. Ramdani S, Wijaya I. Financial distress prediction using sales growth and corporate governance in mining sector

- companies. MONEX Journal. 2019;8(2): 34-45.
55. Syuhada P, Muda I, Rujiman F. The effect of financial performance and company size on financial distress in property and real estate companies on the indonesia stock exchange. Journal of Accounting and Financial Research. 2020;8(2):319-336. Available:<https://ejournal.upi.edu/index.php/JRAK/article/view/22684>

© 2024 Hajarah et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:

<https://www.sdiarticle5.com/review-history/111488>