CORPORATE GOVERNANCE AND FINANCIAL RATIOS OF MANUFACTURING COMPANIES ON FINANCIAL DISTRESS: THE MAIN BOARD AND DEVELOPMENT BOARD OF IDX

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Abstract

Financial distress is a condition where a company is unable to meet its obligations when they directed to bankruptcy. The purpose of this study was to analyze influence of corporate governance, profitability, liquidity, leverage and earning growth on financial distress. Research sample data used in this study were manufacturing companies listed on the main board and development board on the Indonesia Stock Exchange in 2016-2020. Logistic regression analysis had been applied to analyze data of study. The results show that the factors that influence Financial Distress in manufacturing companies on the main board and development board were different. For manufacturing companies on main board, influencing factors of financial distress were independent audit committee, liquidity, leverage, and earning growth. Meanwhile, board size, profitability, liquidity, leverage and earning growth were influencing factors of financial distress for manufacturing companies on development board.

Keywords: Financial Distress; Corporate Governance; Profitability; Liquidity; Leverage,

JEL Classification: D22, G33, G40

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INTRODUCTION

To respond challenges of economic globalization, every company is required to be able to compete and be able to create progress so that goal of increasing profits can be achieved. Competition is caused by the emergence of new companies that can produce higher quality goods and services. Business competition requires every company to continuously do innovation and maintain profit growth in order not to be displaced by competitors. For companies that bear some problems and lose in competition, they tend to bear financial problems or financial distress Financial distress can lead businesses into bankruptcy or liquidation (Samanta & Johnston, 2019). Financial distress is situations where a corporation cannot pay its debts or obligations (Geng et al. 2015). Edwards et al., (2016) state that financial distress is a company or institution that bears high capital costs, lacks access to funding from external parties, being weak in risk, and tends to bear risks.

Halteh et al., (2018) stated that the primary causes of financial distress can be divided into five categories: financial, economic, disaster, negligence, and fraud. Financial distress, according to (Platt & Platt, 2002), is the state of deteriorating financial circumstances that takes place prior to bankruptcy. Financial stress happens when a company's total asset liquidation is less than its total debt projection (Chen et al., 1995). Financial distress is directly related to corporate governance (Yu, 2011; Hodgson et al., 2011). Previous studies, the relation between financial crisis and governance had been explored (Manzaneque et al., 2016; Darrat et al., 2016; Siddiqui, 2015; Mariano et al., 2020; Ashraf et al., 2021). The general result of various research show that financial distress can occur when directors, shareholders or CEOs make decisions that are more concerned with their own interests than with the core aims of the organization.

There are two listing boards for companies listed on the Indonesia Stock Exchange (IDX), namely the main board and the development board. Main board consists of issuers with an asset value of more than Rp. 250 billion, a good track record and they booked profits. Financial reports from last three years have been audited and without modification IDX (2021). Meanwhile, development board consists of companies that have not met requirements to be listed on main board. It includes companies that are prospective but have not yet made a profit and companies that are currently in financial rejuvenation IDX (2021). Issuers have assets with a value of Rp. 50 billion to Rp. 250 billion and perform audited financial statements for at least the last 12 months without modification. But, companies listed on main board can still bear financial distress, too.

The value of earnings before interest, taxes, depreciation, and amortization (EBITDA) can be used to determine whether a company is in financial distress. If EBITDA value is less than the financial expenses, financial distress occurs. Meanwhile, if EBITDA value is more than financial expenses, a company is financially healthy (Pindado et al., 2008; Manzaneque et al., 2016); Mariano et al., 2020; Ashraf et al., 2021). The percentage of manufacturing companies on the IDX that were in financial distress varied significantly between 2016 and 2020 (Figure 1).

From Figure 1, manufacturing companies on main board bearing financial distress in 2016 were 26.03% and 31.76% in 2020. Meanwhile, manufacturing companies on development board bearing financial distress in 2016 were 26.19% 20, 29% in 2019 and 27.71% in 2020. The COVID-19 pandemic, which began in March 2020, is to blame for the rise in both the number and proportion of businesses experiencing financial distress. At that time, government implemented restrictions on community activities and this policy had an impact on economy and people's purchasing power. The demand for goods and services was significantly reduced. Thus, many companies bore difficulties to sell their products. The company's financial state was poor, as evidenced by a deterioration in financial measures and the quality of corporate governance.

The previous studies about financial distress conducted Robert & Ho (2019), Ashraf et al. (2021), and AlHares (2020). Several studies concluded that ownership concentration affected financial distress. Meanwhile, the Study of Manzaneque et al. (2016) concluded that ownership concentration had no effect on financial distress. Handriani et al. (2021), Mariano et al. (2020), concluded that board size had an effect on financial distress. Meanwhile, the study of Ombaba & Kosgei (2017) stated that the size of the board had no effect on financial distress.

Research by Ruparelia & Njuguna, (2016), Mariano et al., (2020) concluded that director remuneration had an effect on financial distress. Meanwhile, research by

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Manzaneque et al. (2016) state that director remuneration did not affect financial distress. The study of Ashraf et al. (2021) concluded that audit committee independence had an effect on financial distress. Meanwhile, Mariano et al. (2020) stated that audit committee independence did not affect financial distress. Zelie (2019) and Isayas (2021) stated that profitability affectted financial distress. While study of Dirman (2020) financial distress was unaffected by profitability.

Financial distress was found to be negatively impacted by liquidity (Waqas & Md-Rus, 2018; Fernández-Gámez et al., 2020; Curry et al., 2018). The study of Ninh et al. (2018), Lee & Manual, (2019), and Mselmi et al. (2017) came to the conclusion that leverage affected financial distress. Leverage, according to research by Baimwera & Muriuki (2014) has no impact on financial distress. Financial distress was positively and significantly impacted by earnings growth (Kristanti, 2017; Tesfamariam, 2014). Meanwhile, Isayas (2021) claimed that financial distress was negatively impacted by profits increase.

LITERATURE REVIEW

Agency Theory

Agency theory was first developed by Jensen & Meckling (1976). Jensen & Meckling (1976) explain that agency theory is a cooperation between two economic actors, namely the principal (company owner) and another person or party (agent) who is employed to act on behalf of the principal, including decision-making authority. The focus of the agency theory is to explain that the relationship that exists within the organization of a company, namely shareholders (stakeholders) act as principals with managers or in this case managers as agents, which is called the principal-agent relationship (Lukviarman,2016). According to Jensen & Meckling (1976), principals as owners or shareholders can employ managers or agents to manage the resources owned by the company with the aim of not only getting profit, but also maintaining the sustainability of the company. The company has gone bankrupt due to agency problems or structural complications to the governance of a company; not only weaknesses in corporate governance, but also conflicts of interest that cause financial distress; in turn, causing companies to collapse, destroying stakeholders and significantly (Dibra, 2016). Conflicts of interest between board members lead to manipulation of asset values, prices, and financial position. Agency theory helps us understand how corporate governance issues have a direct impact on the likelihood of financial distress.

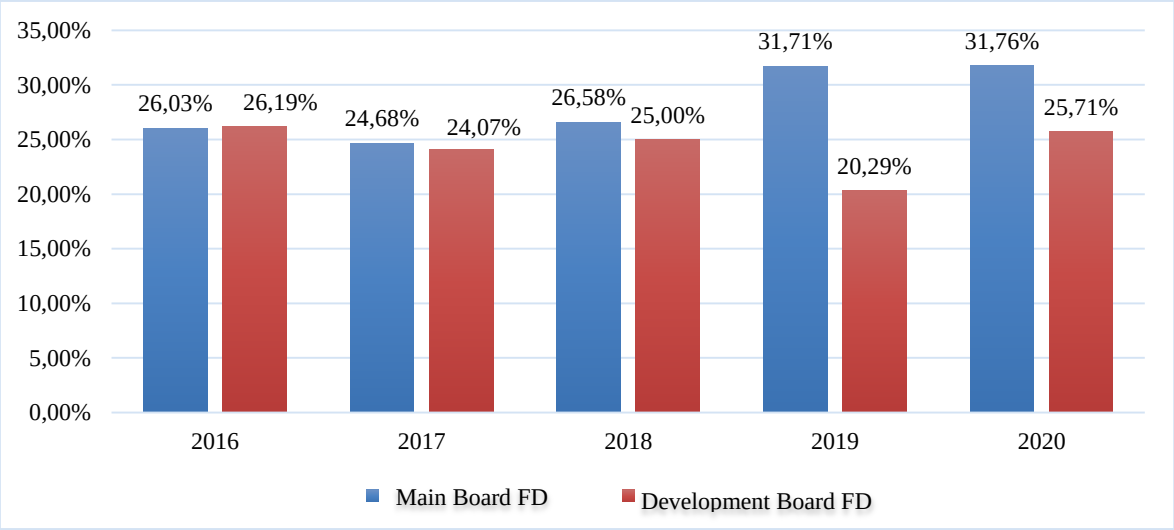

Figure 1. Financial Distress in The Main Board and Development Board

Signaling Theory

Signals, namely activities carried out by company management by providing instructions to investors regarding how management can view the prospects of the company. Based on Spence's research on Job Market Signaling, a signal theory was developed. According to Spence (1973) the recipient can use the pertinent information offered by the information owner to modify his behavior in accordance with the intended signal. Signal theory is a strategy used by management to inform investors about how they view the prospects for the firm. The management will make an effort to raise company performance because doing so will generate profits for the business (Dirman, 2020). According to signal theory, the business will provide financial statements for use by investors or other outside stakeholders in decision-making (Fashhan & Fitriana, 2019).

Agency Theory

Agency theory is described as the agency relationship between corporate owners (shareholders) and firm management. The agency relationship is an agreement between one party who designates the principal and the other party as agent. The principle delegated authority to the agent to act in the principal's best interests. The agency relationship between the principal and the agent seeks to bear the costs of oversight and engagement (Jensen & Meckling, 1976). Agency problems can arise between the principal and the agent when the interests of the agent and the principal are not aligned. the principal wants to maximize the return on his investment, while the agent will try to maximize his utility. For example, when the scheme is related to profits, agents may decide on accounting policies to increase profits (Schroeder, 2019)

Financial Distress

Platt & Platt (2002) and Mselmi et al. (2017) defines financial distress as a condition of the inability or insufficiency of the company's cash flow in meeting contractually required payments. The condition of financial distress in companies can also arise due to the company's inability to manage and maintain the stability of its financial performance. Financial distress is a condition when the cash flow from the company's operations is insufficient to pay its debts (Darrat et al., 2016). Financial distress is associated with the company's inability to pay debts on time (Geng et al., 2015). Financial debt is the main cause of financial distress or default (Ninh et al., 2018). Platt & Platt (2002), financial distress is a stage where there is a decline in financial condition before liquidation or bankruptcy occurs. Companies will experience financial distress if the company has high capital costs, lacks access to funding from external parties, has weak credit ratings, and tends to prefer to take risks (Edwards et al. 2016). When a company experiences financial distress, the company's finances are in a declining condition so that it can be difficult for the company to pay its debts (Probohudono, 2016)

Hypothesis Development

Influence of Ownership Concentration on Financial Distress

Ownership concentration indicate proportion of ownership of largest shareholders or investors in a company Saidat et al. (2019). Ownership concentration is divided into 2 parts, namely concentrated ownership structure and dispersed ownership structure (Mariano et al., 2020). Concentrated ownership raises the risk of financial distress since it might result in monopolistic decision making and undermines corporate independence (Isayas (2021). A research conducted by Mariano et al. (2020) concluded that concentrated shareholders had a higher capacity to control an effective business so that it reduced financial distress. (AlHares, 2020) discovered that concentration of ownership

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had a negative impact on financial distress. Thus, both first hypotheses were:

H1a : Negatively, ownership concentration influences financial distress in manufacturing companies on the main board

H1b : Negatively, ownership concentration influences financial distress in manufacturing companies on the development board.

Influence of Board Size on Financial Distress

Board size is number of members who become company's board of directors (Ohiokha et al., 2016). A larger board of directors offers more advantages and has more connections, which might result in more resources being available to operate the organization (Mariano et al., 2020). According to agency theory, firms must effectively adopt governance and control mechanisms to decrease information gaps and agency costs. The board of directors is a crucial component of corporate governance, according to agency theory (Harymawan et al., 2021). The Board of Directors has a collegiate responsibility to run and organize company to achieve mutually agreed goals. The research results of Mariano et al. (2020), Manzaneque et al. (2016), Darrat et al. (2016), and Brédart, (2014) conclude that board size had a negative impact on financial distress. According to Ashraf et al. (2021), having a high number of board members enabled businesses to access a wider range of resources and information to further their objectives. Based on some of explanations above, both second hypotheses formulated were:

H2a : Negatively, board size influences financial distress in manufacturing companies on the main board.

H2b : Negatively, board size influences financial distress in manufacturing companies on the development board.

Influence of Director Remuneration on Financial Distress

Compensation for both financial and non-financial achievement is known as remuneration. Salaries, bonuses, stock options, restricted shares, pension funds, and other benefits are some ways that these benefits might be obtained (Neokleous, 2015). Remuneration is one of factors that can affect work motivation. The right remuneration policy encourages directors to increase expected performance Ruparelia & Njuguna 2016). In line with agency theory, remuneration for directors affects company. Director compensation has a detrimental effect on financial distress (Mariano et al., 2020). From several supporting arguments above, two third hypotheses that could be formulated were:

H3a : Negatively, Director remuneration influences financial distress in manufacturing companies on the main board.

H3b : Negatively, Director remuneration influences financial distress in manufacturing companies on the development board.

Influence of Audit Committee Independent on Financial Distress

Independent audit committee not only helps in reducing company costs but also realizes the function of internal regulation (Puni, 2015). The independence that is always maintained by audit committee fosters shareholder confidence regarding the information provided by company (Nuresa, 2015). Audit committee has a very important responsibility in assisting company directors in realizing their responsibilities in corporate governance domain (Spira 2003). Research conducted by Ashraf et al. (2021) concluded that an independent audit committee negatively

influenced financial distress. From some supporting explanations above, two fourth hypotheses formulated were:

H4a : Negatively, the Independent Audit Committee influences financial distress in manufacturing companies on the main board.

H4b : Negatively, the Independent Audit Committee influences financial distress in manufacturing companies on the development board.

Influence of Profitability on Financial Distress

Return on Assets is a ratio indicator that describes profitability of using company assets (Ahmed, 2015). A high ROA ratio indicates efficient use of assets in order to earn more profits. Positively, this ability is related to company's ability to generate profits, obtain external financial sources, and increase company equity (Laitinen & Suvas, 2016). A corporation is less likely to experience financial distress if it has a better capacity to produce earnings or profits. Financial distress was found to be negatively impacted by profitability, according to studies by Isayas (2021), Baklouti et al. (2016), Laitinen & Suvas (2016) Therefore, both fifth hypotheses formulated were:

H5a : Negatively, profitability influences financial distress in manufacturing companies on the main board.

H5b : Negatively, profitability influences financial distress in manufacturing companies on the development board.

The Influence of Liquidity on Financial Distress

Current ratio is a measure of liquidity. The ability of a corporation to pay down current debts at maturity is measured by the current ratio (Moch et al. 2019). This ratio is derived by contrasting the present assets and liabilities of the organization. As a result, a company's ability to pay its current liabilities in the short term is determined using its current assets utilizing the current ratio (Balasubramanian et al. 2019). Previous studies by Chiaramonte & Casu (2017), Waqas & Md-Rus (2018) stated that role of liquidity ratios was very important in predicting financial distress.

Companies having high amounts of liquidity may reduce the chance of financial hardship. It was backed up by research data from As a result, the current ratio is used to measure a company's ability to pay current liabilities using current assets in the short term (Balasubramanian et al. 2019).

Companies having high amounts of liquidity may reduce the chance of financial distress. It was backed up by research results from Shrivastava et al. (2018) that showed a drop in the company's current ratio increased the probability of financial hardship. Additionally, according to various studies current ratio has a detrimental impact on financial distress (Isayas, 2021; Fernández-Gámez et al., 2020; Balasubramanian et al., 2019). From s everal supporting arguments, both sixth hypotheses formulated were:

H6a : Negatively, liquidity influences financial distress in manufacturing companies on the main board.

H6b : Negatively, liquidity influences financial distress in manufacturing companies on the development board. The Effect of Liquidity on Financial Distress.

Influence of Leverage on Financial Distress

Leverage is measured through debt to equity ratio (DER). It is calculated by dividing equity by long-term debt (Isayas, 2021). The debt to equity ratio, which measures the percentage of stock used to pay off debt, illustrates a company's

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capacity to fulfill its responsibilities to repay all debts. Higher debt to equity ratios increase a company's risk of experiencing financial distress. According to Mselmi et al. (2017), a high debt-to-equity ratio showed that a business aggressively used debt finance to expand its operational activities. Companies that are in financial distress are often burdened with a large debt value and of course added with high interest rates. Studies conducted by Isayas (2021), Lee & Manual, (2019), Ninh et al. (2018) showed that financial distress would increase when company's leverage value increased as well. Thus, two seventh hypotheses formulated were:

H7a : Positively, leverage influences financial distress in manufacturing companies on the main board.

H7b : Positively, leverage influences financial distress in manufacturing companies on the development board.

Influence of Earnings Growth on Financial Distress

With profit, ability of a company to provide dividends to shareholders can be indicated. Positive profit growth illustrates condition of good company performance (Harahap, 2016; Utari, 2014). Of course, high profit growth illustrates good profitability. Thus, dividend value given to investors is also high. High profit growth is a positive signal (good news) so that investors are willing to invest funds in companies with the expectation of getting large number of dividends or capital gains. This is in line with the signaling theory, which claims that investors receive a signal when information is published to carry out their investment activity (Jogiyanto, 2013). Research by Isayas (2021) concluded that earnings growth negatively influenced financial distress. Based on some of the descriptions above, the two eighth hypotheses formulated were:

H8a : Negatively, earnings growth influences financial distress in manufacturing companies on the main board.

H8b : Negatively, earnings growth influences financial distress in manufacturing companies on the development board.

Financial distress can be influenced by corporate governance and financial ratios. The relationship between variables in this study is shown in Figure 2.

RESEARCH METHODS

Secondary data sources from the company's annual report were obtained using the Bloomberg Laboratory at Diponegoro University and the IDX (www.idx.co.id). 194 Indonesian manufacturing companies listed on the IDX between 2016 and 2020 made up the study's sample. They are made up of 86 enterprises on the development board and 108 manufacturing companies on the main board. Purposive sampling was used to gather the research sample. Some considerations or sampling criteria were manufacturing company on main board and development board listed on IDX from 2016 to 2020; manufacturing companies on main board and development board that released annual reports consecutively from 2016 to 2020 with complete financial data; and manufacturing companies on main board and development board manufacturers that released annual reports consecutively from 2016 to 2020 with complete financial data. To measure financial distress in this study as applied by Manzaneque et al. (2015), using EBITDA and financial expenses for two consecutive years. If EBITDA is less than the financial burden, it is said that there is financial distress in the company. If EBITDA is more than the financial burden, there will be no financial distress for the company.

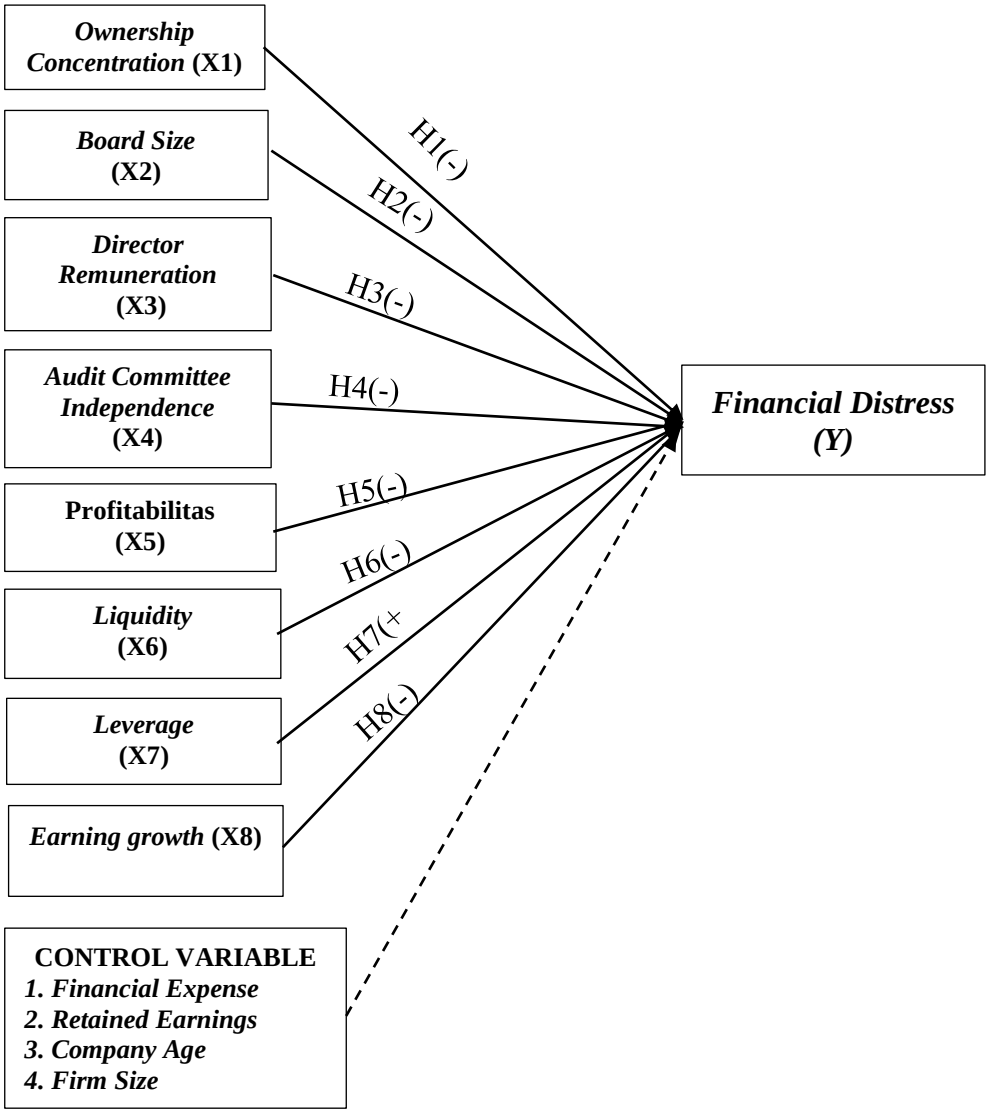

Figure 2. Conceptual Framework

Table 1. Definition of Variables

No.	Variable	Definition	Measurement
1.	Financial Distress	Decrease of a company's financial performance before liquidation or bankruptcy	0 = non financial distress 1 = Financial distress
2.	Ownership Concentration	Percentage of shares owned by a large share holder (more than 3%)	Percent (%)
3.	Board *Size*	Number of Board of Directors in a company.	Person
4	Director Remuneration	Remuneration Given to Board of Directors	Rp. (billion)
5	Audit Committee Independent	Number of Independent Audit Committee in a company	Person
6.	Profitability	Ratio between net profit (net income) and number of assets Net Income ROA = ---------- Total Asset	Ratio
7	Liquidity	Ratio between Current Assets and Current Debts Current Asset CR = ---------- Current Liability	Ratio

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Table 1. Continue

No.	Variable	Definition	Measurement
8	Leverage	Ratio between total liabilities and Total Equity Total Debt DER = ---------- Total Equity	Ratio
9	Earnings Growth	Variance between income at t period with income at t-1 period (EBITt – EBITt-1) EG = ---------- EBITt-1	Ratio
	Control Variables		
10	Financial Expense	Costs incurred in carrying out financial functions.	LNFE
11	Retained Earnings	The company's net profit that is not distributed in the form of dividends	LNRE
12	Company age	How long the company has existed	Year
13.	Firm size	The total amount of assets owned by the company	Ln (total Asset)

Analysis technique applied was binary logistic regression because independent variable in this study was a dichotomous variable consisting of two nonmetric (dummy) categories (Gregova et al., 2020). A logistic model is more effective than a probability model based on linear regression since it can accommodate both qualitative and quantitative inputs (Adzis et al., 2020). The logistic regression equation models in this study were:

Model 1 (Main Board)

$$Ln\left(\frac{p}{1-p}\right) = \beta0+\beta1.OC+\beta2.BSIZE+\beta3.DR+\beta4.ACI+\beta5.ROA+\beta6.CR+\beta7.DER+\beta8.EG+\beta9.FE+\beta10.RE+\beta11.CAge+\beta12.FSize+\varepsilon \quad ... (1)$$

Model 2 (Development Board)

$$Ln\left(\frac{p}{1-p}\right) = \beta0+\beta1.OC+\beta2.BSIZE+\beta3.DR+\beta4.ACI+\beta5.ROA+\beta6.CR+\beta7.DER+\beta8.EG+\beta9.FE+\beta10.RE+\beta11.Cage+\beta12.FSize+\varepsilon \quad ..... (2)$$

Explanation :

$Ln\left(\frac{p}{1-p}\right)$ =Odds ratio or probability of Financial Distress
β0 =Constant
OC =Ownership Concentration
BSIZE =Board Size
DR =Director Remuneration
ACI =Audit Committee Independence
ROA =Profitability
CR =Liquidity
DER =Leverage
EG =Earnings Growth
FE =Financial Expense
RE =Retained Earnings
Cage =Company Age.
FSize =Firm Size
e =Error

RESULT AND DISCUSSION

Descriptive Statistics

The research object were main board and a development board manufacturing companies listed on IDX from 2016 to 2020 with a sampling process show in Table 2.

Descriptive statistics explained general description of data that had been obtained. The values of minimum, maximum, average (mean), and standard deviation were the data that needed to be analyzed using descriptive statistics. The descriptive statistical analysis in Table 3 showed that the final sample (n) after going through the outlier process in data processing through SPSS was 200 units from 60 manufacturing companies listed on main board and 136 observational data from 36 manufacturing companies listed on development board of IDX from 2016 to 2020. The average Ownership Concentration of manufacturing companies on main board

was 57.39%. This value was slightly lower than average Ownership Concentration in manufacturing companies on development board (58.95%).

The average Board Size of manufacturing companies on main board was 4.77. Meanwhile, average Board Size of manufacturing companies on development board was 3.91. The average Director Remuneration for manufacturing companies on the main board was Rp. 16.92 billion. Meanwhile, average Director Remuneration for manufacturing companies on development board was Rp. 4.62 billion rupiah. The average number of Independent Audit Committees in manufacturing companies on main boards and development boards was 3 people. Profitability of manufacturing companies on the main board was 6.15 and Profitability of manufacturing companies on the development board was lower (2.92). The average Liquidity Ratio on the main board was 2.19 and 1.56 for companies on the development board. The average Leverage Ratio of companies on main board was 26.5 and it was lower than average Leverage Ratio of manufacturing companies on development board (30.05). The average Earning Growth of manufacturing companies on the main board was 14.45% and this value was lower than average earning growth of companies on the development board (26.12).

Table 2. Sample Selection Process

Description	Main Board	Development Board
- Manufacturing companies listed on the IDX during the 2016-2020 period.	108	86
- Manufacturing companies that issue annual reports for 2016-2020 and have complete financial data according to the data that will be used in research.	60	36
Number of Companies	60	36
Number of Sample	300	180
Outlier	100	44
Total Data Observation	200	136

Tabel 3. Statistik Deskriptif

Variabel	Main Board (n=200)				Development Board (n=136)			
	Min	Max	Mean	Std. Dev	Min	Max	Mean	Std. Dev
Ownership Concentration (%)	18,02	96,44	57,39	18.22	16,47	97,16	58,95	22,42
Board Size (number)	2	10	4,77	1,80	1	11	3,91	1,67
Director Remuneration (Rp billion)	0,004	97,5	16,92	20,39	0,002	49,44	4,62	6,53
Indep Audit Committee (number)	2	4	3,02	0,24	1	4	2,99	0,19
Profitabilitas (rasio)	-10,81	25,37	6,15	6,44	-16,13	17,51	2,92	5,55
Likuiditas (rasio)	0,43	7,58	2,19	1,44	0,11	7,30	1,56	0,92
Leverage (rasio)	0,10	68,21	26,58	17,23	0,05	73,92	30,05	16,94
Earning Growth (%)	-0,95	74,23	14,45	13,51	-0,99	594,73	26,12	60,88
Financial Expense (Rp billion)	0,08	846,63	138,16	202,85	0,08	1.200	52,30	135,04
Retained Earnings (Rp billion)	-5.400	26.860	2.197	4.385	-31.590	13.340	-54,22	4.180
Company Age (years)	8	69	36,76	11,78	4	65	36,51	12,85
Firm Size (Rp. billion)	139,8	49.500	7.261	9.727	40,66	45.780	2.088	5.733

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Control Variable Testing

This study uses a control variable. Therefore, it is first tested on the control variables to determine the control variables to be included in the logistic regression analysis. The results of the logistic regression test for the control variable are summarized in the Table 4. Based this table, control variables in manufacturing companies on main board that influenced Financial Distress were Financial Expenses and Retained Earnings. While control variables in manufacturing companies on development board that influenced financial distress were Financial Expenses and Firm Size. Therefore, control variables included in the logistic regression model were Financial Expense, Retained Earning and Firm Size.

Logistic Regression

Assessing The Model (Overall Model Fit)

A model's overall effectiveness was evaluated by contrasting the value of -2 Log Likelihood (-2LL) at the beginning (Block Number = 0), where the model only included constant values, with -2 Log Likelihood (-2LL) at the end (Block Number = 1), where the model also included constants and independent variables. Table 5 showed iteration history flow. This was Iteration history which consisted of step 0 which was initial -2LL and Step 1 which was final -2LL. Based on this table, initial -2LL score for on the main board was 213.266 and 13.553 on the development board. The final -2LL value of a manufacturing company on the main board was 150,341 and 82,473 for a manufacturing company on development board. It indicated decrease and difference between initial and final -2LL. Therefore, it was possible to draw the conclusion that the model used in this investigation fit the data.

Determination Coefficient Test

The result of determinant coefficient test in logistic regression was presented in Table 6. Based on description in this table, values of Nagelkerke R Square manufacturing companies on main board were 0.412 and 0.513 on development board. It indicated that 41.20% of financial distress in manufacturing companies on main board could be explained by variables of ownership concentration, board size, director remuneration, independent audit committee, profitability, liquidity, leverage and earnings growth 51.20% in manufacturing companies on development board.

Model Fit Test

The results of model fit test through Hosmer and Lemeshow's testing were presented in Table 7. From description in this, it was known that Chi-Square value of fit criteria of the model tested by Hosmer and Lemeshow Testing for manufacturing companies on main board was 7.160 with a significance probability value or Sig. 0.520 > 0.05. While the Chi-Square value for manufacturing companies on development board was 10.325 with a significance probability value of 0.243 > 0.05. Thus, it could be concluded that there was no difference between estimated data of logistic regression model and observational data. Therefore, the model is eligible and appropriate to apply.

Classification Matrix

The results of classification matrix analysis were presented in Table 8a. Based on this table, we knew that the prediction accuracy of Financial Distress model for manufacturing companies on main board was 80.5% with correct predictions. In this case, 145 companies did not bear Financial Distress and 16 companies suffered it. Meanwhile, from Table 8b, it was known that prediction accuracy of Financial Distress model for manufacturing companies on development board was 89.7% with correct predictions. There were

107 companies that did not suffer Financial Distress and 15 companies experienced bore it.

Hypothesis Testing

Wald testing was used to test hypotheses. To partially ascertain the impact of independent variable on dependent variable, Wald testing in logistic regression was used. The results of logistical regression testing were performed in Table 9.

Table 4. Control Variable Testing

	Main Board			Development Board		
	B	Wald	Sig.	B	Wald	Sig.
Financial Expense	.006	17.877	0.000***	.034	6.508	0.011**
Retained Earnings	-.121	3.419	0.064*	.000	.437	0.508
Company Age	-.028	2.248	0.134	-.010	.306	0.580
Firm Size	-.114	.269	0.604	-.001	5.998	0.014**
Constant	2.238	.135	0.713	-1.212	3.229	0.072

Description: ***Significant 1%, **Significant 5%; *Significant 10%

Table 5. Iteration History

	-2 Log likelihood			
	Main Board		Development Board	
Iteration	Step 0	Step 1	Step 0	Step 1
1	213.934	165.147	136.361	101.392
2	213.266	152.500	135.555	86.592
3	213.266	150.445	135.553	82.907
4	213.266	150.341	135.553	82.485
5		150.341		82.473
6		150.341		82.473
7				82.473

Table 6. R Square

Main Board		Development Board	
Cox & Snell R-Square	Nagelkerke R-Square	Cox & Snell R-Square	Nagelkerke R-Square
0.270	0.412	0.323	0.512

Table 7. Hosmer and Lemeshow's Test

Main Board			Development Board		
Chi-square	df	Sig.	Chi-square	df	Sig.
7.160	8	0.520	10.325	8	0.243

Table 8a. Classification Table (Main Board)

		Predicted		
		Financial Distress		
Observed		Non Financial Distress	Financial Distress	Percentage Correct
Financial Distress	Non Financial Distress	145	10	93.5
	Financial Distress	29	16	35.6
Overall Percentage				80.5

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Table 8b. Classification Table (Development Board)

Observed		Predicted		
		Financial Distress		
		Non Financial Distress	Financial Distress	Percentage Correct
Financial Distress	Non Financial Distress	107	2	98.2
	Financial Distress	12	15	55.6
Overall Percentage				89.7

Table 9. Summary of Statistical

independent variable	Main Board			Development Board		
	B	Wald	Sig.	B	Wald	Sig.
Ownership Concentration	-0.401	0.462	0.497	-0.015	1.389	0.239
Board Size	-0.080	0.305	0.581	-2.900	10.326	0.001***
Director Remuneration	-0.051	0.102	0.750	-0.117	1.054	0.305
Indep Committee Audit	-2.678	4.785	0.029**	-1.976	0.254	0.614
Profitability	-0.047	1.362	0.243	-0.159	6.690	0.010**
Liquidity	-1.891	13.529	0.000***	-2.017	5.694	0.017**
Leverage	0.061	10.793	0.001***	0.046	3.972	0.046**
Earning Growth	-0.545	5.671	0.017**	-0.750	8.279	0.004***
Financial expense	0.005	12.782	0.000***	0.036	4.546	0.033**
Retained Earning	-0.132	2.489	0.115			
Firm size				-0.001	4.003	0.045**
Constant	-0.256	0.003	0.959	-8.100	2.244	0.134

Description: ***Significant 1%, **Significant 5%; *Significant 10%

Discussion

The Influence of Ownership Concentration on Financial Distress

Ownership concentration is one of important factors to improve company performance. The largest shareholder has the authority to supervise and control management actions in order to reduce conflicts with management and improve the company's performance. Based on Table 9, Ownership Concentration did not influence Financial Distress in manufacturing companies on main board or manufacturing companies on development board. Because controlling owners are passive, they do not provide effective monitoring of the company's management. As a result, controlling owners do not contribute to the prevention of financial distress (Manzaneque et al., 2016), Therefore, this study could bot prove empirically that concentration of ownership would control management behavior in preventing financial distress. The result of this study was in line with the conclusions of previous studies conducted by Jodjana et al., (2021) and Manzaneque et al. (2016), which concluded that ownership concentration did not influence financial distress. However, the conclusion of this study was different from those of (Mariano et al., 2020) which stated that number of concentrated shareholders had a higher capacity to control the business more effectively to reduce possibility of financial distress. Likewise, this study provided different with AlHares (2020) and Abugri (2022) which stated that concentration of ownership negatively influenced financial distress.

Manufacturing companies on main board performed positive logistic regression coefficient of ownership concentration. This conclusion was in line with Jodjana, et al., (2021), which concluded that ownership concentration gave positive sign. Those with the most shares may be able to leverage their influence on management to their benefit. Finally, this position is harmful to minority shareholders and raises the likelihood of financial issues (La-Porta et al, 1999; Lee & Yeh, 2004).

Manufacturing firms on development board indicated a negative logistic regression coefficient of ownership concentration. This conclusion was in line with the findings of (AlHares, 2020) which stated that the concentration of ownership performed negative sign. Companies with concentrated ownership include high controlling rights of shareholders. This control right has an impact on corporate performance and reduces the likelihood of financial distress (Mariano et al., 2020)

Influence of Board Size on Financial Distress

The size of the board can influence the quality of corporate governance (Shivdasani, A., & Zenner, 2002). In agency theory, a large number of board members makes control of chief executive officer performance easier to do (Brédart, 2014) and reduces its dominance (Singh, H., & Harianto, 1989). In addition, a large number of board members makes it easier to establish relationships with external parties (Goodstein, Gautam, & Boeker, 1994). In the Financial Services Authority (OJK) Regulation Number 33/POJK.04/ 2014 regarding Directors and Board of Commissioners of Public Companies article 20 paragraph 1, it is stated that the board of commissioners consists of at least 2 persons.

Through the description in Table 9, Board Size of manufacturing companies on main board had no influence on Financial Distress. The average Board Size of manufacturing companies on main board was 4.77 and it was considered equivalent to a 5 person board of directors. This amount was relatively small, so this situation made it difficult to divide tasks in carrying out company's operational activities. Thus, it resulted in ineffective and inefficient operational activities. This conclusion was in line with Permana & Umiyati (2022) and Ombaba & Kosgei (2017) which stated that financial distress was influenced by board size.

The results of hypothesis testing show that financial distress in manufacturing firms is negatively impacted by the size of the development board. The bigger size of the board of directors, the smaller possibility for a company to suffer financial problems. The larger Board Size, the stronger control company's internal activities. It made company's performance increase. Thus, possibility to bear Financial Distress was reduced. This conclusion was in line with previous studies by Nasir & Ali (2018), Darrat et al., (2016), Manzaneque et al. (2016), and Brédart, (2014) who state that board size had a negative effect on financial distress. Likewise, there was previous research conclusion from Mariano et al., (2020) who concluded that board size negatively influenced financial distress.

This research result in line with Manzaneque et al., (2016) that having a large number of board members would result in a diversity of viewpoints, increase financial performance, and reduce the chance of a financial distress. According to Ashraf et al. (2021), a sizable board could assist businesses in acquiring more varied resources and information to accomplish objectives. According to Mariano et al., (2020), A bigger board would come with more perks and more connections to provide more resources for the organization's management. Greater board members, produced more benefits and connections (Manzaneque et al., 2016; Mariano et al., 2020),

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Influence of Director Remuneration on Financial Distress

A reward for performance is known as remuneration or compensation, and it can take the form of both monetary and non-monetary rewards. Salary, bonuses, stock options, stock grants, pension funds, and other benefits are all examples of rewards (Neokleous, 2015). It can be a bridge between agent and principal and it reduce conflict between the two parties (Majid et al., 2019). From Table 9, it was shown that Director Remuneration did not affect Financial Distress either in manufacturing companies on main board or on development board. It indicated that a high amount of remuneration for the board of directors did not guarantee a reduction in financial problems or financial distress in manufacturing companies. Companies which suffer financial distress will focus more on reducing costs. Cost reduction is done through a reallocation of board of directors remuneration to cover the shortage of funds. This conclusion was in line with the conclusions of Madya & Serli's research (2021) and Manzaneque et al., (2016) which concluded that director remuneration did not affect financial distress.

Companies on main board, director remuneration performed a positive regression coefficient on Financial Distress. This conclusion was in inline with Monem & Ng, (2013), and Ruparelia & Njuguna (2016) which explained that remuneration of directors performed a positive regression coefficient value on financial distress. Excessive board remuneration might increase the chance of financial disaster. Companies that are suffering financial distress will provide a lower amount of remuneration for directors.

In manufacturing companies on development board, Director Remuneration performed negative regression coefficient on Financial Distress. As a result, the value of higher Director Remuneration could lower the probability of financial crisis. It was consistent with the research findings of Mariano et al. (2021), who highlighted that higher remuneration causes a higher degree of motivation and improves corporate performance. Furthermore, this situation can reduce possibility of financial problems or financial distress. Likewise, according to research conclusions of Yatim (2013). He found evidence that a high amount of director remuneration could improve financial performance and growth opportunities so that the possibility for companies to suffer financial problems would be reduced.

Appropriate remuneration policies can encourage directors to make improvements that increase expected performance Ruparelia & Njuguna, (2016). According to Kostyuk (2016), remuneration for directors is important so that they can do their responsibilities properly. The suitability of the remuneration value with job risks and responsibilities can encourage agents to suppress their personal interests and be more willing to take risks, so that they can provide maximum return on investment to investors or shareholders. According to Abdullah (2006), companies that were experiencing financial distress tend to make thrift on operational cash expenditures and paid lower total amount of remuneration compared to companies that were financially healthy. It is expected that the higher number of directors' remuneration would reduce financial distress (Mariano et al. 2020). Agency theory believes that remuneration creates incentives for directors to show good performance. Agency costs might be decreased through high director wages and compensation agreements (Conyon & He, 2011).

Influence of Audit Committee Independence On Financial Distress

According to IDX Directors Decree No. Kep-315/BEI/06/2000, the audit committee is a committee formed by the board of commissioners, where members are appointed and dismissed by the board of

commissioners, whose job is to help carry out inspections or research deemed necessary on the implementation of the board of directors' functions in managing the company. Whereas in the OJK Regulation Number 55/PJOK.04/2015 article 1 it was stated that in order to assist and facilitate implementation of the duties and functions of board of commissioners, an audit committee was formed by the company's board of commissioners. Later, they would be responsible to him. Audit committee is a part of the corporate governance mechanism in internal control.

Agency theory states that an independent audit committee can reduce information asymmetry among management and company owners. According to hypothesis testing, audit committee independence had a negative impact on financial distress in main board manufacturing enterprises. Ashraf et al. (2021) explained that an independent audit committee had a negative impact on financial distress. Meanwhile, for manufacturing companies on development board, audit committee independence did not influence financial distress. Independent audit committee members did not have direct relationship with financial distress. The presence of a significant number of independent audit committees does not exclude the likelihood of financial difficulties. This conclusion was in line with the conclusions of the studies of Mariano et al., (2020), Fuad (2017) which concluded that audit committee independence did not influence financial distress.

According to agency theory, a good supervisory mechanism can reduce opportunistic behavior of managers who act as agents. To construct an audit committee capable of efficiently controlling and supervising the company's management activities, the audit committee must have a sufficient number of members to carry out its obligations. The larger size of independent audit committee, effectiveness of audit committee will increase because it has more resources to deal with company matters. Therefore, existence of an effective audit committee is expected to positively change various strategies to generate profits in coming years and enable companies to avoid financial problems (Rahmat et al. 2008).

Influence of Profitability on Financial Distress

Profitability is the ability of a corporation to earn profits. Profit is one indicator of how well a company performs. Profitability encompasses all income and costs incurred by the company as a result of the usage of assets and liabilities within a certain period (Dirman, 2020). Ineffective use of assets will lead to difficulties in obtaining profits. At last, this situation will trigger a company's financial distress. Through the description in Table 9, Profitability in manufacturing companies on main board did not influence Financial Distress. This research was in line with Winarna et al., (2017) who concluded that financial distress was unaffected by profitability.

Profitability of manufacturing companies on main board was not able to influence financial distress. This situation was caused by several factors that affected changes in net income to total assets from year to year. Thus, investors tended to ignore net profit information so that management was not motivated to determine financial distress through this ratio. Meanwhile, profitability had a negative impact on financial distress in manufacturing firm on the development board. The lower of the likelihood of financial distress, the higher the company's ability to produce profits.

Companies with high profitability had used assets effectively and efficiently. Effectiveness and efficiency of use of assets could reduce costs that had to be be incurred. Therefore, it had a positive impact on savings and adequacy of funds to run a business which could further reduce possibility of financial distress. This conclusion was in accordance with

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previous researches conducted by oleh Isayas (2021); Waqas & Md-Rus (2018), Baklouti et al. (2016), Laitinen & Suvas (2016) who concluded that financial distress was negatively impacted by profitability.

Influence of Liquidity on Financial Distress

A ratio called liquidity seeks to gauge a company's capacity to fulfill its immediate obligations. Liquidity can be considered to have an impact on the capital structure since a company with strong liquidity is able to service its short-term debt, which tends to reduce total debt and result in a smaller capital structure (Reschiwati et al., 2020). A company's lower liquidity ratio indicates a greater risk of financial distress. Financial difficulties tend not to occur when a company's financial condition is very liquid Kristanti (2017). The liquidity ratio provides information about how a company can settle current liabilities on time. If current amount of company's debt is too large, this condition will affect total amount of company's debt that must be paid off immediately. Based on the description in Table 9, Financial Distress of manufacturing companies on the main board and the development board was negatively impacted by liquidity. A corporation is less likely to experience financial difficulties or financial hardship the higher its level of liquidity. High liquidity companies would be able to fulfill their short-term obligations on time. This ability would improve financial performance and avoid financial distress. This research was in line with previous research by Isayas (2021); Fernández-Gámez et al. (2020); Curry et al. (2018) who came to the conclusion that liquidity had a detrimental impact on financial distress.

Influence of Leverage On Financial Distress

Leverage is a large or little amount of debt utilized by a firm to fund its operational activities (Jihadi et al., 2021). Inability to meet financial obligations can lead to financial trouble. For companies with greater total financial liability than total value of assets, risk of default that has an impact on following year can be borne (Halim et al., 2018). The company has an obligation to manage assets properly so that it can pay off debts on time and minimize risk of default.

From the description in Table 9, Leverage performed positive influence on Financial Distress of manufacturing companies on main board and on the development board. Thus, higher leverage value, the higher possibility of financial problems or financial distress. Large companies finance operational activities with more capital from third parties or capital in the form of debt. A company may have poor financial conditions and a higher risk of financial distress if it is unable to manage debt effectively or if the amount of debt used to support operational activities is excessive.

This research, in line with studies by Isayas (2021), Lee & Manual (2019), Ninh et al. (2018), Gathecha (2016) who concluded that leverage level positively affected financial distress. However, this conclusion was indeed different with Baimwera & Muriuki, (2014) This came to the conclusion that financial suffering was unaffected by leverage.

Influence of Growth On Financial Distress

Table 9 showed that Earning Growth negatively affected Financial Distress of manufacturing companies on main board and on development board. Therefore, a corporation is less likely to experience financial distress if its earnings growth is larger. This research was in line with previous researches by Isayas (2021) that financial suffering was negatively impacted by earnings growth. The ability to effectively create income was shown by the high profit growth value. With effective asset management, a company was able to generate greater profits and

show excellent performance. Thus, with a high profit ratio, risk of financial distress would be lower. Contrarily, the likelihood of financial hardship increasing with a lower profit ratio.

CONCLUSION AND RECOMMENDATION

Influencing factors of Financial Distress for manufacturing companies on main board and development board were different in some certain aspects. For Manufacturing companies on main Board, influencing factors of Financial Distress were Independent Audit Committee, Liquidity, Leverage, and Earning Growth. Meanwhile, Board Size, Profitability, Liquidity, Leverage and Earning Growth were influencing factors of Financial Distress for manufacturing companies on development board.

Several recommendation proposed for company financial policy makers to reduce possibility of Financial Distress were adjusting number of Board Size according to real needs, keeping Liquidity ratio prudently in order to be able to pay short term obligations, managing all debts carefully to control Leverage level of company, and maintaining Earning Growth as well as possible for keeping good company's financial health.

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