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ANALYSIS OF FACTOR AFFECTING FINANCIAL DISTRESS MODERATED BY INSTITUTIONAL OWNERSHIP

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ABSTRACT

Purpose: This research was conducted on manufacturing companies in Indonesia. This study aims to find out how the relationship between sales growth, tax aggressiveness, and operating capacity to the financial distress of manufacturing companies in Indonesia with moderated institutional ownership

Methodology/approach: The secondary data collection method is the purposive sampling method. Data will be selected according to the criteria. The data test used Descriptive Analysis of Statistics, Chow, Hausman and LM. The hypothesis test uses panel data regression model test and moderated regression analysis.

Findings: Based on the results of the study, it shows that there is an influence of negative sales growth, and tax aggressiveness on financial distress. Institutional ownership is able to moderate sales growth and operating capacity against financial distress.

Practical implications: In order for investors to be able to know the latest factors that manage sales growth and operating capacity well and increase institutional ownership supervision of the company's operational activities, can play an important role in reducing financial distress.

Originality/value: There is still limited research in Southeast Asian countries on the role of institutional ownership in reducing financial distress as a moderation variation, as well as to complement the existing research



shortcomings, by raising the types and effects of the role of institutional ownership as a moderation

Keywords: Financial Distress; Indonesia; Institutional Ownership; Manufacture.

ABSTRAK

Tujuan penelitian: Penelitian ini dilakukan pada Perusahaan manufaktur di Indonesia. Penelitian ini bertujuan untuk mengetahui bagaimana hubungan sales growth, tax aggressiveness, operating capacity terhadap financial distress perusahaan manufaktur di Indonesia dengan dimoderasi institutional ownership.

Metode/pendekatan: Metode pengumpulan data sekunder dengan metode purposive sampling. Data akan diseleksi sesuai kriteria. Uji data menggunakan analisis Deskriptif Statistik, Chow, Hausman dan LM. Uji hipotesis menggunakan uji model regresi data panel dan moderated regresi analisis.

Hasil: Berdasarkan hasil penelitian menunjukkan bahwa terdapat pengaruh negative sales growth, dan agresivitas pajak terhadap financial distress. Kepemilikan institusional mampu memoderasi sales growth dan operating capacity terhadap financial distress.

Implikasi praktik: Agar investor mampu mengetahui factor terkini bahwa mengelola sales growth dan operating capacity dengan baik serta meningkatkan pengawasan Kepemilikan institusional terhadap aktivitas kegiatan operasional perusahaan, mampu berperan penting dalam menurunkan financial distress.

Orisinalitas/kebaharuan: masih terbatas penelitian di negara asia tenggara tentang peran kepemilikan institusional dalam menurunkan financial distress sebagai variabeli moderasi, serta untuk melengkapi kekurangan penelitian yang sudah ada, dengan memunculkan jenis dan efek dari peran kepemilikan institusional sebagai pemoderasi.

Kata kunci: Indonesia; Kesulitan Keuangan; Kepemilikan Institusional; Manufaktur.

JRAK INTRODUCTION

15.1 The purpose of establishing a company is to seek the maximum profit, and to reduce the cost of operational activities, in achieving this goal the company tries to innovate to maintain their business, and tries to be effective in their operational activities ([Bakar et al., 2016](#)).

Companies that cannot find new innovations, and are not effective in their operational activities can experience bankruptcy, which is characterized by a continuous decline in the company's financial performance which is referred to as financial distress (Annisa et al., 2022; Mahera & Hartono, 2022). Companies that experience financial distress will make investors lose their attractiveness in investing their capital in the company because of the high risk they will receive (Annisa et al., 2022; Bakar et al., 2016). Companies that are in financial distress will also have difficulty paying off their obligations so that creditors cannot provide the company. The loan is due to the absence of a guarantee of return or the company is considered unable to repay the loan. The phenomenon of financial distress has occurred in PT Sari wangi in 2018, where the company began to have difficulty paying off their debts in the last 2 years before finally going bankrupt, and was taken over by CR Aroma in 2018.

Prior to bankruptcy, a corporation may experience monetary difficulties, which is a phase of deteriorating financial health. Due to the management's poor ability to predict global economic changes, the company's financial conditions have deteriorated, and its financial objectives—profits—have not been met. Because the company's profit is less than its cost of capital or its cash flow's present value is less than the obligation, failure to turn a profit is a prerequisite for the company's inability to pay its debts.

Four businesses are expected to have financial difficulties, similar to the occurrence in manufacturing firms across several industrial subsectors. The profit value as determined by the ROA ratio in the graph graphic below illustrates this.

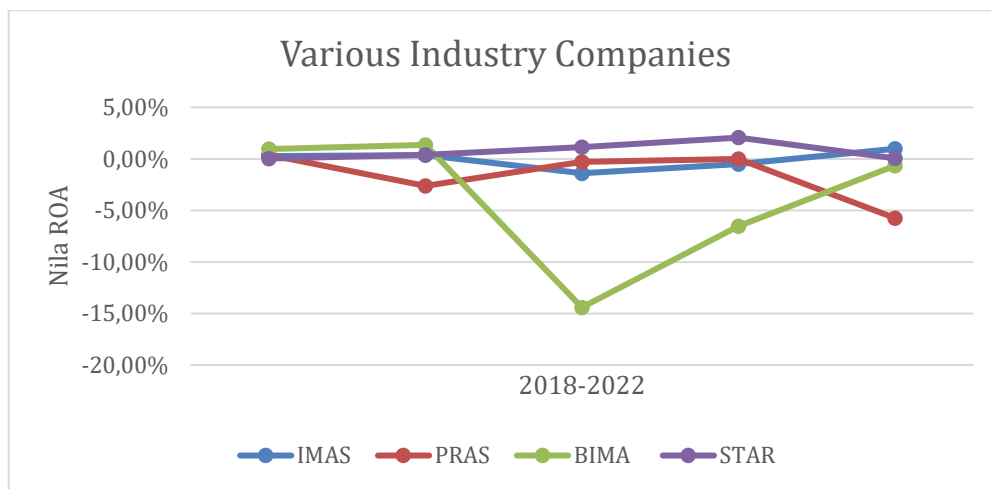


Figure 1.
ROA Value
of Indonesia
Various
Industrial
Companies

As can be observed from the above graphic, the ROA (Return on Assets) value for the four manufacturing enterprises across different industrial subsectors is below the optimal value of 5%. PT Indomobil Sukses International, PT Prima Alloy Steel Universal, PT Primarindo Asia Infrastructure, and PT Buana Artha Anugerah all experienced a concurrent decline in ROA value from 2018 to 2021. This suggests that the firm is in financial hardship as a result of a drop in earnings brought on by a drop in sales and productivity. Based on the aforementioned occurrence, it is evident that businesses that may encounter financial crisis circumstances typically start with a decline in performance and productivity, which is followed by a decline in profit and, in some cases, persistently negative earnings over a number of years. outlined the two cycles—the decline halting cycle and the performance enhancement cycle (recovery)—that businesses go through when they are in financial crisis. One element that must be taken into account in order to forecast a company's ability to

weather financial troubles is decline stemming. Businesses that go through financial difficulties will affect the economy and result in significant losses for creditors and investors. As a result, the management is viewed as performing poorly in running the business. Therefore, the management will decide to use manipulation techniques to boost earnings and conceal financial troubles in order to conceal the subpar performance.

According to agency theory, managers, or agents, make choices for the organization. The available tactics for increasing sales are chosen by management. Consequently, increasing sales will lessen the chance that the business may face financial difficulties. In this manner, management will be able to estimate the amount of money needed for taxes and determine when payments should be made, which will help the business create a more accurate cash budget. However, this tax planning sometimes forces management to take every possible step to reduce the amount of money that must be spent, which makes it difficult for operations to run smoothly. Furthermore, agency theory explains that management has the authority and duty to optimize the use of the business's operating capacity in order to maximize profits. This will reduce the risk of the company experiencing financial distress by maximizing the use of assets to generate sales. In this manner, the management may effectively meet the goals that the founders have set.

Financial distress can be influenced by several factors such as sales growth, tax aggressiveness, and operating capacity. A company that experiences profit growth every period indicates that the company has good performance, and has no difficulty paying off its obligations ([Nigri et al., 2021](#)). Companies that experience sales growth will also help companies get out of financial distress due to rising corporate profits, and the availability of funds to pay off their debts ([Ježovita, 2022](#); [Juhaeriah et al., 2021](#)). On the other hand, the company's declining profit is an indication that the company has failed to innovate its business, and has difficulty competing ([Bogers et al., 2019](#)).

The next factor that can affect the state of financial distress is tax aggressiveness. In order to compete in the fierce business competition, companies try to maximize the profits they get, and minimize the burden borne by the company ([Abbas et al., 2022](#)). One of the efforts to reduce the burden that companies have is to carry out tax aggressiveness ([Hasan et al., 2017](#)). Companies that carry out tax aggressiveness tend to be companies that are experiencing difficulties, so that the tax aggressiveness actions carried out by the company are an indication of the company in a state of financial distress or a decline in company performance ([Annisa et al., 2022](#)).

The next factor that can affect financial distress is operating capacity. Operating capacity is the ability of a company to manage its assets in its operational activities to increase sales ([Maronrong et al., 2022](#)). Good operating capacity indicates that the company can manage its assets for operational activities effectively ([Rochendi & Nuryaman, 2022](#)). Effective operational activities can make operational expenses can be minimized as high as possible which will increase the profits obtained by the company ([Prasetya & Oktavianna, 2021](#)). Good operating capacity can encourage companies to avoid financial distress or financial difficulties ([Visvanathan, 2021](#)). The low operating capacity ratio of a company is an indication that the operational activities carried out by the company are less effective ([Rochendi & Nuryaman, 2022](#)). Ineffective operating capacity indicates that the company cannot manage its assets properly, causing operational costs that should be minimized ([Mahera & Hartono, 2022](#); [Sar, 2018](#)). The company's low operating capacity can encourage the company to be exposed to financial distress because the profits obtained cannot cover the capital used for operational activities ([Zhu et al., 2016](#)).

In previous studies [Prasetya & Oktavianna, \(2021\)](#), [Rochendi & Nuryaman, \(2022\)](#), [Oktaviani \(2020\)](#), [Prasetya and Oktavianna \(2021\)](#), there were contradictory results regarding the factors that affect the level of financial distress in a company. The difference in the results of the study allows for other variables that interact the relationship between the independent variable and the dependent variable from the previous study. This variable is called the moderation variable which is another independent variable that is included in the model because it has a contingency effect from the relationship between the dependent variable and the previous independent variable.

This study also changed the institutional ownership from an independent variable to a moderation variable to strengthen the relationship between sales growth, tax aggressiveness, and operating capacity to financial distress. The selection of institutional ownership as a moderation variable because profit is one of the basis for important decision-making of the company. Institutional ownership is suspected to be able to moderate the relationship between sales growth, tax aggressiveness, and operating capacity to financial distress. This study uses institutional ownership moderation variables because this study uses agency theory. Based on this theory, agents will be motivated to act according to the goal of congruence institutional shareholders have the right to control the company's running and supervistgke management performance so that it can reduce agency conflicts, then it will have an impact on the company's profits ([Ferreira et al., 2022](#)). The role of institutional ownership in maximizing supervision of managerial performance is so important, because ownership is a source of power used to support managerial performance. Research conducted by [R.L \(2021\)](#), [Jain and Zaman \(2020\)](#), [Thu and Khuong \(2018\)](#) and [Lestari \(2020\)](#) Mention that institutional ownership negatively affects financial distress.

Institutional ownership has the potential to moderate the relationship between sales growth, tax aggressiveness, and operating capacity to financial distress. This means that the amount of sales growth, tax aggressiveness, and operating capacity do not directly affect the magnitude of a company's financial distress but rather depend on how much impact the supervision of Institutional Ownership has on the control of financial factors in the company.

This study adds tax aggressiveness as an independent variable because there is a gap between theory and practice, namely the consequence of saving operational costs to reduce tax costs, by reducing the cost of the company's operational activities, thus hindering the company's performance in getting profits so that sometimes the company experiences financial distress, of course this is contrary to the agency theory and the signaling theory, Where the agent (management) is trusted by the owner to increase the company's revenue and provide information signals on the company's performance to the public, but in reality the agent (management) emphasizes the cost of the company's operational activities, thus hindering the company's performance to get profits, and this transparency information is never conveyed to the owner and investor (public).

This study contributes to the development of pre-existing financial distress research, but with a different model, namely the use of Institutional Ownership as a moderation variable, besides that the difference of this research lies in the research object, namely using all manufacturing companies in 2018-2021. This study also adds the variables of tax aggressiveness, and operating capacity as independent variables whose effects have not been previously studied on financial distress.

Research on financial distress has been done by many previous researchers, and still produces differences in research results from each factor that affects financial distress. Research

conducted by ([Prasetya & Oktavianna, 2021](#)). Successfully proving that sales growth has a positive effect on financial distress, this is because the company has ineffective operational performance that increases the operational burden on every sale made ([Rochendi & Nuryaman, 2022](#)). Research conducted by [Oktaviani \(2020\)](#) Proving that sales growth has a negative effect on financial distress, a high sales level will increase the profit obtained so that the company has the availability of sufficient funds to pay off its obligations ([Rochendi & Nuryaman, 2022](#)), High sales growth also shows good company performance so that it can attract investors in investing capital which will make the company avoid financial distress. Research conducted by [Prasetya and Oktavianna \(2021\)](#) proves that sales growth has no effect on financial distress, according to [Prasetya and Oktavianna \(2021\)](#) This is because sales growth is still very volatile in many companies, and the insignificant increase in sales growth each period makes sales growth have no effect on financial distress.

Institutional ownership is the ownership of shares owned by an institution such as the government, banks, insurance companies, investment companies, and other institutions ([Thu & Khuong, 2018](#)). The amount of ownership of an institution is considered to increase external supervision and control over the company ([Thu & Khuong, 2018](#)). The large amount of institutional ownership in a company can make management work effectively because of the high level of supervision, and can minimize frauds committed by management that can harm the company which encourages the company to avoid financial distress ([Int et al., 2020](#)). Low institutional ownership can reduce control over management, which increases the likelihood of decision-making that only benefits management, and increases the incidence of fraud committed by management ([Wulansari et al., 2020](#)) This will encourage the company to experience financial difficulties or financial distress.

Ha1 : Sales growth affects financial distress

Ha2 : Institutional ownership moderates the relationship between sales growth and financial distress

Research conducted by ([Nugroho et al., 2020](#)) successfully proving that tax aggressiveness has a positive effect on financial distress, this is because companies that carry out tax aggressiveness indicate that the company is experiencing financial difficulties ([Setiorini et al., 2022](#)). Research conducted by [Muzakki, Kartiko, and Pratama \(2023\)](#) Proving that tax aggressiveness has a negative effect on financial distress, this means that tax aggressiveness is a form of operational efficiency by reducing the tax burden so as to encourage companies to avoid financial distress. Research conducted by [Setiorini et al. \(2022\)](#) proving that tax aggressiveness has no effect on financial distress. Tax aggressiveness only aims to maximize profits, not solve the problem of high debt levels, and operational expenses owned by companies ([Nugroho et al., 2020](#)) This makes tax aggressiveness not a solution to avoid financial distress, and has no effect on financial distress.

Institutional ownership will minimize companies from taking aggressive tax actions, which will weaken the influence of tax aggressiveness on financial distress. [Lestari \(2020\)](#) In his research, it is stated that the supervision carried out by shareholders from institutions can affect the tax aggressiveness carried out by the company, [Lestari \(2020\)](#) The Independent Board of Commissioners, and the Audit Committee are more able to minimize tax aggressiveness, this indicates that there have been many studies that have discussed independent commissioners, and audit committees in financial distress, but there are still few that discuss institutional ownership as a moderator between the influence of tax aggressiveness on financial distress.

Hb1 : tax aggressiveness affects financial distress

Hb2 : Institutional ownership moderates the relationship between tax aggressiveness and financial distress

Research conducted by [\(Oktaviani, 2020\)](#) successfully proving that operating capacity has a positive effect on financial distress, High operating capacity that is financed more from debt will increase debt levels. The large interest cost will drive the company's financial difficulties [\(Achyarsyah, 2016\)](#). Research conducted by [Maronrong et al. \(2022\)](#) It has been proven that operating capacity has a negative impact on financial distress. The effective management of the company's assets can improve the company's performance on a sustainable basis [\(Maronrong et al., 2022\)](#). Companies that are effective in their operational activities can make companies avoid financial distress [\(Dwiyani & Purnomo, 2016\)](#). Research conducted [\(Livia Ramadhani & Khairunnisa, 2019\)](#) Proving that operating capacity has no effect on financial distress, [Livia Ramadhani and Khairunnisa \(2019\)](#) stated that a company's financial difficulties due to high interest expenses do not come from operational activities that cause operating capacity to have no effect on financial distress.

The high share ownership by institutions can pressure management to work optimally to obtain high profits, this will increase the effectiveness of the company's operating capacity [\(Yani, 2014\)](#). Efektifnya operating capacity dapat membuat perusahaan terhindar dari financial distress sehingga kepemilikan insitutisional dapat memoderasi pengaruh operating capacity terhadap financial distress [Mahera and Hartono \(2022\)](#) In his research, it was proved that institutional ownership could not affect operating capacity, this is because institutions do not directly affect the performance of company management in managing their operational activities, which results in institutional ownership not being able to moderate the influence of operating capacity on financial distress [\(R.I., 2021\)](#).

Hc1 : Operating Capacity Affects Financial Distress

Hc2: Institutional ownership moderates the relationship between operating capacity and financial distress

METHOD

Based on the data used, this type of research includes quantitative research. The quantitative method is a scientific approach to managerial, and economic decision-making [\(Kuncoro, 2018\)](#). This research was conducted on manufacturing sector companies listed on the Indonesia Stock Exchange (IDX) for the 2018-2021 period. accessed through the [www.idx.co.id](#) site, and [www.idnfinancial.com](#), as well as other references. The population in this study is manufacturing sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period. Samples were selected using the purposive sampling technique. The data collection method in this study uses literature study and documentation techniques. In this study, the sample criteria used were selected using the purposive sampling method as follows. The sample criteria in the study consist of inclusion criteria and exclusion criteria. Inclusion criteria are the factors that allow companies to participate in research, while exclusion criteria are factors that disqualify companies from participating. To determine the minimum number of samples that must be collected in this study using the rule of thumb method, several rules of thumb to determine the minimum sample size, including correlational research, minimum 30 samples, experimental research, minimum 15 samples per group, survey research, minimum 100 samples and factor analysis, at least 5-10 times the number of variables. All manufacturing sector companies listed on the Indonesia stock exchange during the 2018-2021 period are 73 companies that have variable information

according to the study. There are 27 companies that are delisted and there are 30 companies that have extreme data. From the results of sample selection after using purposive sampling with observation for 4 years, 64 data on company financial statement information were obtained that could be used as research samples, and 64 research objects.

The financial distress assessment in this paper will use the first version of the Z-Score analysis because it is more accurate with the sample used, namely manufacturing companies (Altman et al., 2017). The scoring score refers to the standard Z-Score value limit of Altman's model (Edwarrrd, 1968). Financial distress in this study is calculated using the Altman Z-Score formula, the company is said to be Not Bankrupt if the Z value is > 2.99, the company is in the gray zone if the Z value is 1.81 > Z < 2.99, the company is said to be in the distress zone if the Z value is < 1.81

$$Z = 1.2X + 1.4X + 3.3X + 0.6X + 1.0X \dots\dots\dots(1)$$

Keterangan:

- Z : bankruptcy index
- X1 : working capital / total asset
- X2 : retained earnings / total asset
- X3 : earning before interest and taxes/total asset
- X4 : market value of equity / book value of total debt
- X5 : sales / total asset.

Income tax is the sum of the current tax burden and the deferred tax burden. Profit before tax is net profit before deducting income tax (Mohammad & Zus Rizal, 2023). The smaller the Earning Tax Rate value, the greater the level of tax aggressiveness carried out by the company. On the other hand, the greater the value of the Earning Tax Rate, the smaller the tax aggressiveness. The Earning Tax Rate value ranges from more than 0 and less than 1.

$$ETR = \frac{Total\ Tax\ Burden}{Profit\ Before\ Tax} \dots\dots\dots(2)$$

Operating capacity is a ratio that reflects the accuracy of a company's operational capabilities. This ratio, also known as the activity ratio, is used to measure how well a company manages its assets. The operating capacity ratio can be measured using the formula of total asset turnover or total asset turnover which compares sales to total assets (Sudana, 2015). Measurement of Operating Ratio by (Sudana, 2015) adalah :

$$OC = \frac{Total\ Fixed\ Asset}{Total\ Asset} \dots\dots\dots(3)$$

Institutional ownership is the ownership of company shares owned by institutions and institutions such as insurance companies, banks, investment companies and other institutional ownership. Institutional ownership is important in monitoring management because institutional ownership will encourage a more optimal increase in supervision (Hutagalung et al., 2018). Institutional Ownership can be calculated by the following formula (Murniati et al., 2018):

JRAK
15.1 $IO = \frac{Number\ of\ Shares\ Held\ by\ the\ Institution}{Number\ of\ Shares\ Outstanding} \dots\dots\dots(4)$

The data analysis method in this study uses panel data regression analysis and moderated panel data regression. The regression analysis procedure of panel data consists of 3 regression models, namely the Common Effect Model (CEM), the Fixed Effect Model (FEM), and the Random Effect Model (REM). The selection of panel data regression models was carried out to determine which model was appropriate to use in the research (Winarno, 2017). To choose the right model, it is necessary to carry out certain tests, namely the Chow Test, Hausman Test and Lagrange Multiplier Test. Moderated regression procedure panel data To test the existence of a variable moderation whether it is true as a Pure Moderator, Quasi Moderator, Predictor Moderator or Homologizer Moderator variable (Baron & Kenny, 1986)

$$Fin_Dis = a + b1SG + b2TA + b3OC + e.....(5)$$

$$Fin_Dis = a + b1SG + b2TA + b3OC + b1SG * ZIO + b2SG * ZIO + b3TA * ZIO + e.....(6)$$

Where:

- C : Constanta
- B₁, B₂, B₃ : Regression Coefficient
- Fin_Dis : Financial Distress
- SG : Sales Growth
- TA : Tax Aggresivness
- OC : Operating Capacity
- IO : Institutional Ownership
- e : error

RESULTS AND DISCUSSION

Table 1.
Descriptive
Statistics

	Mean	Med	Max	Min	Std. Dev.	Skew	Obs
Fin_Dis	0.397260	0.000000	1.000000	0.000000	0.490002	0.419919	64
SG	0.084384	0.000000	9.600000	2.000000	0.739507	7.241009	64
TA	0.152603	0.100000	0.300000	0.000000	0.067328	0.743504	64
OC	0.600000	0.600000	1.000000	1.200000	0.137481	0.819417	64
IO	2.236164	0.500000	11.20000	0.300000	3.380911	1.535521	64

Noted: Fin_dis: Financial Distress; SG: Sales Growth; TA: Tax Agresivness; OC: Operating Capital; IO: Institutional Ownership.

Source: output e-views 12

Table 1 shows the number of data (observations) used in this study as many as 64 samples. The average Financial Distress is 0.397 with a minimum of 0.00 and a maximum of 1.00 with a standard deviation of 0.49. This figure gives an idea that manufacturing companies have a low level of financial distress, so in the analysis figure it is described as a minimum of 0.00.

Average sales growth of 0.084 with a minimum of 2.00 and a maximum of 9.60 with a standard deviation of 0.739. This figure gives an idea that manufacturing companies have a low sales growth rate, so in the analysis figure it is described as a minimum of 2.00.

The average Tax Aggressiveness in manufacturing companies is 0.152 with a minimum of 0.00 and a maximum of 0.30. The average tax aggressiveness figure shows a positive number, this means that many manufacturing companies have carried out Tax Aggressiveness activities. This condition illustrates that the manufacturing companies studied are companies that carry out Tax Aggressiveness activities on average.

The average Operating Capacity is 0.600 with a minimum of 0.20 and a maximum of 1.00 with a standard deviation of 0.137. This figure gives an idea that manufacturing companies have a high level of capital incenty, so in the analysis figure it is described as a minimum of 1.20.

The average Institutional Ownership in manufacturing companies is 2,236 with a minimum of 0.30 and a maximum of 11.20. This average Institutional Ownership figure shows a positive number, this means that many manufacturing companies have a percentage of Institutional Ownership. This condition illustrates that the manufacturing companies studied are companies that on average have a proportional percentage of Institutional Ownership.

Estimasi Model Regression Data Panel Analysis

In determining a reliable panel data regression model so that it can be used in accordance with the conditions of the data used, it is required that the panel data regression model test comparisons first be carried out through three stages of testing, the first stage through the Chow Test, the second stage through the Hausman Test and the third through the Lagrange Multiplier Test. That each of these tests each of each model has criteria in order to determine the right model.

Information	Chow Test	Hausman Test	Lagrange Multiplier Test
Effects Test → Cross-section F	5.905895		
Effects Test → Cross-section Chi-square	70.59585		
Test Summary → Cross-section random		1.533251	
Statistic / Chi-Sq. Statistic / Cross-section			27.83209
d.f. / Chi-Sq. d.f./ Time	(15,44) 15	4	0.013133 (-0.9088)
Prob. / Both	0	0.8207	27.84523 (0)

Table 2. Summary of Test Results of research method

Note : Chow Test : the cross-section chi-square value $< \alpha$ (0.05) it can be concluded that Ha accepted meaning appropriate model used is the Fixed Effects (FE); Hausman test : the value of random Cross-section $> \alpha$ (0.05) then H0 is accepted, so it can be concluded that the appropriate model to use is the Random Effect (RE); Lagrange Multiplier test : the value of the Breusch-pagan Cross-section Probability $< \alpha$ (0.05) then Ha accepted, which means the model that is suitable for use is the Random Effect (RE)

Source: Data processed by Eviews 12.0

Information	Data Panel Analysis (RE)	Moderated Panel Data Analysis (MRA)
C	2.089671 / 0.0310	2.196671 / 0.0322
SG	-2.123199 / 0.0300	-2.213199 / 0.0319
TA	-0.886850 / 0.4398	-0.688850 / 0.4938
OC	-2.412272 / 0.0215	-2.272214 / 0.0269
IO		-2.408924 / 0.0193
SG*IO		-2.803021 / 0.0254
TA*IO		1.305809 / 0.1970
OC*IO		2.304203 / 0.0249

Table 3. Model Regression Data Panel Analysis & Moderated Regression Data Panel Analysis

Information	Data Panel Analysis (RE)	Moderated Panel Data Analysis (MRA)
F-statistic	2.81934	
Prob(F-statistic)	0.032925	
R-squared	0.760469	
Adjusted R- squared	0.703552	

Noted: C: Coefecient; SG: Sales Growth; TA: Tax Agresivness; OC: Operating Capacity; IO: Institutional Ownership; SG*IO: Institutional Ownership moderated Sales Growth; TA*IO: Institutional Ownership moderated Tax Agresivness; OC *IO: Institutional Ownership moderated Operating Capacity;

Source: Data processed by Eviews 12.0

Table 4. Identification of results of moderation statistical test types

Indepen Variabel	t-Statistic / Prob	Moderati Variabel	t - Statistic / Prob	Indepe nden * Moder ation	t - Statistic / Prob	Informat ion
(SG --> Fin_Dis)	-2.123199 / 0.0300	(IO --> Fin_Dis)	- 2.408924/ 0.0193	(SG*IO)	- 2.803021/ 0.0254	Quasi Moderato r
(TA --> Fin_Dis)	-0.886850 / 0.4398			(TA* IO)	1.305809/ 0.1970	Pure Moderato r
(OC --> Fin_Dis)	-2.412272 / 0.0215			(OC*IO)	2.304203/ 0.0249	Quasi Moderato r

Source: Data processed by Eviews 12.0

Based on the test results, it can be explained that Institutional Ownership is a Quasi Moderator (pseudo-moderation), which is a variable that is able to moderate the relationship between sales growth and operating capacity to Financial Distress. In addition, Institutional Ownership is a Pure Moderator, which is a variable that can moderate the relationship between Tax Aggressiveness and Financial Distress, even though Tax Aggressiveness to Financial Distress is not significant.

Sales growth has a prob value. $0.0300 < 0.05$. Therefore, it can be concluded that the sales growth (SG) variable in this study has a negative effect on financial distress, the hypothesis is accepted. The results of this study are also in accordance with the research conducted by [Oktaviani \(2020\)](#) which has succeeded in proving that sales growth has a negative effect on financial distress. The results of this study prove that the increase in company sales in each period indicates that the company has improved performance, and can generate high profits that can make the company avoid financial distress ([Oktaviani 2020](#)). The results of this study are in line with the signaling theory, where high sales growth can also attract investors to invest their capital in the company, thereby increasing the availability of company funds for operational activities, and paying off its short-term obligations ([Widyatami et al., 2021](#)). This means that high sales growth will provide a positive information signal to shareholders that the company is in good shape, and avoid financial distress. High sales growth will provide a positive signal to shareholders that the company is in good shape, and avoid financial distress. The results of this study are in line with the results of the research [Ježovita, \(2022\)](#); [Juhaeriah et al., \(2021\)](#); [Bogers et al., \(2019\)](#) which states that Companies that experience sales growth

will also help companies get out of financial distress due to rising corporate profits, and the availability of funds to pay off their debts

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Institutional ownership as a moderation of the influence of sales growth on financial distress has a prob value. $0.0254 < 0.05$. Therefore, it can be concluded that institutional ownership can moderate the influence of sales growth on financial distress, the hypothesis is accepted. The results of this study are supported by research conducted by [\(Dwiyani & Purnomo, 2016\)](#) who argue that institutional ownership can moderate the influence of sales growth on financial distress. The results of this study are in line with the agency's theory that the supervision carried out by institutional shareholders can make management work more effectively, and improve the company's performance [\(Prasetya & Oktavianna, 2021\)](#). In addition, the effective management performance will be able to increase the company's sales, this will encourage the company to avoid financial distress [\(Rochendi & Nuryaman, 2022\)](#). This proves that institutional ownership can make the company act in accordance with the agency theory through the supervision carried out so that the company can avoid fraud carried out by management which can make the company in financial difficulties. The results of this study contribute to investors and company management that institutional ownership has a role in increasing company sales, thus encouraging companies to avoid financial distress, of course this is inseparable from the supervision carried out by institutional ownership.

Tax aggressiveness has a prob value. $0.4398 > 0.05$. Therefore, it can be concluded that the variable of tax aggressiveness has no effect on financial distress, the hypothesis is rejected. This research is in line with the research conducted by [Setiorini et al. \(2022\)](#) which proves in his research that tax aggressiveness has no effect on financial distress, But it is not in line with the results of the study [\(Nugroho et al., 2020\)](#), which states that companies that engage in tax aggressiveness indicate that the company is experiencing financial difficulties. Tax aggressiveness is not only carried out by companies that are experiencing financial distress with the aim of making companies avoid being able to get out of financial distress, but is carried out by companies with the aim of reducing their tax burden to increase profits [\(Setiorini et al., 2022\)](#). The results of this study prove that the company does not provide information about tax aggressiveness to investors, but the company is more informed about the company's methods and plans in the financial statements, this proves that the company does not act in accordance with the signaling theory but in accordance with the theory of positive accounting. Institutional ownership as a moderator of the influence of tax aggressiveness on financial distress has a pro value. $0.1970 > 0.05$. Institutional shareholding does not guarantee that the company acts in accordance with applicable regulations, the shareholders only care about the profits they get from the company, the hypothesis is rejected. The results of this study are in line with the research conducted by [\(Rokhim et al., 2022\)](#) This shows that institutional ownership is not in line with agency theory, but the results of this study can be interpreted by positive accounting theory. Based on the theory of positive accounting which means that supervision carried out by shareholders from institutions cannot minimize operational cost saving actions which are sometimes the cause of financial distress. The lack of the role of institutional shareholders in their supervision is due to the difference in the level of educational background of institutional shareholders about their expertise, especially expertise in the financial field, which plays a very important role in influencing the high or low supervision of institutional shareholders in conducting tax aggressive supervision of financial distress, because the tax management strategy in carrying out tax planning always writes down the plan and the method of tax aggressiveness in financial statements. Information about the company's tax aggressive planning and methods

is generally not disseminated to investors. The results of this study contribute to investors and management, that the importance of the educational background role of institutional shareholders about their expertise, especially expertise in the financial sector in conducting aggressive tax supervision contained in financial statements.

Operating capacity has a prob value. $0.0215 < 0.05$. Therefore, it can be concluded that the operating capacity variable in this study has a negative effect on financial distress, the hypothesis is accepted. The results of this study are supported by research conducted by [\(Maronrong et al., 2022\)](#) which successfully proves that operating capacity has a negative effect on financial distress. The effectiveness of companies in managing the assets they have for operational activities can reduce the operational expenses incurred so that they can increase profits, and reduce unnecessary expenses [\(Livia Ramadhani & Khairunnisa, 2019\)](#). The high operating capacity ratio shows that the company has good performance, and can encourage the company to avoid financial distress. Companies with good operating capacity provide positive information signals for shareholders because the company can operate effectively, and avoid financial distress, On the other hand, the low operating capacity indicates that the company does not act in accordance with the agency's theory because it does not carry out the tasks assigned by the shareholders. The results of this study are in line with the results of the research from [Oktaviani, \(2020\)](#), [Achyarsyah, \(2016\)](#), [Maronrong et al. \(2022\)](#), which states that operating capacity has an influence on financial distress. However, the results of this study are not in line with the results of the research conducted by [Livia Ramadhani & Khairunnisa, \(2019\)](#) which states that operating capacity has no effect on financial distress. The results of this study contribute to investors, that the greater or less effectiveness of the company's operating capacity in managing the assets owned by the company can reduce the operational expenses incurred by the company, so that it can increase profits, and reduce unnecessary operational expenses.

Institutional ownership as a moderator of the influence of operating capacity on financial distress has a pro value. $0.0249 < 0.05$. Therefore, it can be concluded that institutional ownership can moderate the influence of operating capacity on financial distress, the hypothesis is accepted. The results of this study are supported by research conducted by [\(Mahera & Hartono, 2022\)](#) which proves that institutional ownership can moderate the influence of operating capacity on financial distress. The results of this study are in accordance with the agency theory, namely institutional shareholders want maximum results from the company's performance, the pressure given by institutional shareholders will encourage the company to work optimally by increasing the effectiveness of their operational activities. The high level of operating capacity of a company can make the company avoid financial distress [\(Mahera & Hartono, 2022\)](#). In addition, high share ownership by institutions can pressure management to work optimally to obtain high profits, this will increase the effectiveness of the company's operating capacity. Effective operating capacity can make companies avoid financial distress so that institutional ownership can moderate the influence of operating capacity on financial distress [\(Mahera & Hartono, 2022\)](#). However, these results are not in line with the results of the study [\(R.L, 2021\)](#) which stated in his research that if institutional ownership cannot affect operating capacity, this is because the institution does not directly affect the performance of the company's management in managing its operational activities which results in institutional ownership not being able to moderate the influence of operating capacity on financial distress. The results of this study contribute to management and investors, that the importance of the role of institutional ownership in playing a role in pressuring management to work optimally to get high profits, this will increase the effectiveness of the company's operating capacity.

CONCLUSION

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This study investigates the effect of sales growth, tax aggressiveness, and operating capacity on financial distress by moderated institutional ownership. Based on the results of the study, it shows that there is a negative influence of Sales growth and Operating capacity on financial distress. However, there was no effect between tax aggressiveness and financial distress. Based on the test results, it can be explained that Institutional Ownership is a Quasi Moderator (pseudo-moderation), which is a variable that is able to moderate the relationship between sales growth and operating capacity to Financial Distress. In addition, Institutional Ownership is a Pure Moderator, which is a variable that can moderate the relationship between Tax Aggressiveness and Financial Distress, even though Tax Aggressiveness to Financial Distress is not significant.

This study has research limitations such as the need to calculate tax aggressiveness appropriately and reflect its tax activities. This is based on the fact that even if the company experiences bankruptcy, the company will definitely try to pay its tax activities. In addition, even though the company is not experiencing losses, the company will still carry out its tax treatment. Furthermore, the data in this study has a small number of samples, due to the number of companies that closed between 2020-2021, which was caused by the covid 19 pandemic. Furthermore, for the next researcher, it is important to consider control variables such as financial or non-financial factors, and by adding variables about green profitability, because now manufacturing companies are rampant in carrying out activities with the theme of the environment, and not a few manufacturing companies sometimes attract profits in these activities. Then, adding the independence variable, and ethnic CEOs to confirm with ownership owned by a particular ethnicity will survive a financial distress situation more than a company that is not owned by an ethnic CEO. In addition, the researcher further included a proxy related to the accounting education background of institutional shareholders, because based on the results of this study, it was found that institutional shareholders did not provide much supervision over the tax aggressiveness contained in the financial statements.

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