

The Effect of Cash Flow and CSR Moderated by Corporate Governance

Nofrizal Bagas Wardana*, Herlita Mutyarawati, Scholastica Meillia Purwidyasari

Faculty of Economics, Trisakti University
Jl Kyai Tapa No.1 Grogol, West Jakarta, 11450, Indonesia

Article history:

Received: 2023-03-15

Revised: 2023-04-10

Accepted: 2023-04-27

✉ Corresponding Author:

Name of author: Nofrizal Bagas Wardana

E-mail: nofrizalbagas123@gmail.com

Abstract

This study analyzes and examines the effect that cash flow has on financial distress and corporate social responsibility through moderation by the role of corporate governance. The sample of companies applied is manufacturing companies in Indonesia and listed on the Indonesia Stock Exchange with the period 2019-2021. The samples that fit the criteria were found to be 44 companies. The data obtained through purposive sampling and using secondary data from the annual report published by each company. The results of this study indicate that financial distress t_{-1} has a positive effect on financial distress significantly. corporate social responsibility does not affect financial distress. Corporate governance has a positive effect on financial distress significantly. Cash flow has a negative and significant effect on financial distress. Leverage has a negative and significant effect on financial distress. Asset tangibility does not affect financial distress. Corporate governance moderates the effect of corporate social responsibility on financial distress.

Keywords : Cash flow, Corporate governance, Corporate social responsibility, Financial distress

JEL Classification : G32

This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license



1. Introduction

Indonesia is experiencing significant economic progress, the economic progress is mainly supported in the manufacturing sector. One example is manufacturing companies that actively produce various kinds of materials, components, and raw materials which are then processed manually or using machines as finished products that are ready for use. These products are then marketed to consumers. In addition, manufacturing companies also play a role in producing more complex goods or distributed more widely to retail.

It has been revealed by the Minister of Finance, Sri Mulyani that companies in the industrial and agribusiness sectors will experience bankruptcy quite easily. The expression refers to the Z-Score which has been categorized into three groups. First, green which is defined as safe, through a score equal to or more than 2.9 for manufacturing companies and equal to or more than 2.6 for companies in the non-

manufacturing sector. Then second, yellow which indicates that it is included in the alert category, through a score between 1.23-2.9 for manufacturing companies, while the score is between 1.1-2.6 for non-manufacturing companies (Adrian Wail Akhlas, 2019).

In the early stages of a company experiencing financial difficulties, there is usually a tendency to weaken the company's ability to meet all its obligations. as for financial distress is the stage of worsening the financial condition of a company before finding that it has gone bankrupt or will be liquidated, due to various factors related to its operations, such as based on the composition of the balance sheet, that the comparison of total assets is smaller or not enough to meet the level of its liabilities. The occurrence of financial distress is when, before the company goes bankrupt, when it is found that the company is unable to fulfill its financial obligations so that the related company is declared to be experiencing financial distress. So that companies will be encouraged to anticipate the possibility of financial distress so that they can continue to operate and compete in the global market.

The increasing awareness of companies in terms of their responsibilities in the social and environmental spheres or corporate social responsibility will also increase the interest and disclosure of them, both in the form of stand-alone (sustainability report) and those that are still included in the annual report (financial report) news (Ningtyas et al., 2023). By involving themselves in corporate social responsibility activities, companies can be considered as companies that have good internal conditions. The success of an entity is closely related to the welfare of the community in the area where it operates, because businesses cannot run or grow in isolation. Businesses have a responsibility to society in return for the benefits and profits they receive. The purpose of CSR is not only to focus on maximizing profits, but also to expand the company's responsibilities to various related parties, including investors, consumers, communities, employees, and the environment (Samidi et al., 2019).

As for companies with high operating cash flow, of course, they have a higher source of funds in maintaining their operational capabilities. If there continues to be a decrease in the operating cash flow of a company, the higher the possibility of a company to experience financial distress (Lee et al., 2017). Every company has cash flow to determine the income and expenses listed in the financial statements, so that it can be analyzed regarding financial conditions. Companies experiencing financial distress are characterized by insolvent conditions. This is because the cash flow owned by the company is unable to pay obligations / debts with a predetermined maturity, due to negative cash flow. When this goes on for a long time, it means that financial distress can end in bankruptcy (Akhmad Sigit Adiwibowo et al., 2023). Companies that have good corporate governance should have good financial and non-financial conditions, usually with ineffective and un-disciplined internal management of the company, even companies with better good corporate governance can experience financial distress. Financial Distress is an early indicator of revival and can be influenced by financial factors and non-financial factors (Yeterina Widi Nugrahanti, 2021). Companies that implement good corporate governance practices and comply with ethical rules in managing the company can generate long-term profits.

In addition, by implementing corporate social responsibility, the company shows concern and responsibility for the impacts generated by the company, both related to social, environmental and economic aspects. This has a positive impact on the company's reputation which is getting better in the eyes of the community. Therefore, with the implementation of good corporate governance and CSR, it is possible to encourage an increase in company performance, which will then prevent the probability of the company having financial distress problems (Yanti & Purwanto, 2023). As for this study, corporate governance as a moderating variable to determine the performance of managers in the implementation of the authority that has been given. This has an impact on the company's operational growth in line with the interests of shareholders. If the company implements good corporate governance, the company will be in a healthy condition, and reduce the potential for financial distress (Nugrahanti, 2021).

This research is intended to be able to re-test the various factors that have been included in several previous studies, which are suspected of having an influence on the company's financial distress condition, because there are still some differences from previous research, as shown by Gupta & Krishnamurti, (2018) showing CSR has a negative effect on financial distress. Meanwhile, in (Yeterina Widi Nugrahanti, 2021) corporate social responsibility negatively affects financial distress. With a greater liquidity ratio, it means that the company is less likely to find a financial distress condition. Regarding the cash flow variable, there are also different results, as in Giarto & Fachrurrozie (2020) which states that cash flow negatively affects financial distress. This is because when the value of cash

flow is getting bigger, it can reduce the possibility of financial distress in a company. The opposite result is found in Pandapotan & Puspitasari, (2022) which states that cash flow has a positive effect on financial distress, by showing that the higher the cash flow, the more the company can get into financial distress, if the company cannot manage cash appropriately.

Based on the description above, this research is quite interesting to do, because based on the current economic conditions in Indonesia, which are considered to be almost on the verge of a recession or possible crisis that will result in the bankruptcy of many companies involved. Until then, it is necessary to have various strategies that are considered feasible in dealing with the possibility of financial distress by a company. Then the research also verified the research previously conducted by Farooq et al., (2023) with its independent variable, corporate responsibility and moderated by corporate governance to be able to estimate the possibility of financial distress in corporate companies. However, this study will add to the independent variables, with lagged financial distress and cash flow. The addition of lagged financial distress and cash flow in this case is strengthened by the theory of Foster, (1986), that cash flow from operations (CFFO) or operating cash flow is useful in predicting the possibility of corporate bankruptcy. Until then, it puts several factors tested in this study, consisting of the effect of cash flow on financial distress and corporate social responsibility moderated by the role of corporate governance of manufacturing companies listed on the IDX. This study analyzes and examines the effect that cash flow has on financial distress and corporate social responsibility through moderation by the role of corporate governance.

2. Hypotheses Development

Effect of Financial Distress t_{-1} on Financial Distress

Companies experiencing financial decline are characterized by an inability to control or manage sales, thus affecting financial conditions. Research related to financial distress _{t_{-1}} (lagged financial distress) conducted by Humairoh & Nurulita, (2022) states that financial distress t_{-1} has a positive and significant effect on financial distress. If the company experiences lagged financial distress from the previous year, it shows an indication of irregularities in the company's financial condition and can be seen from significant losses. These results are in line with research (Yazdanfar & Öhman, 2020).

H₁: There is an effect of financial distress t_{-1} on financial distress

The Effect of Corporate Social Responsibility on Financial Distress

Corporate Social Responsibility is a significant determinant of financial distress. Research Gupta & Krishnamurti, (2018) concluded that companies with better social responsibility will gain support from their stakeholders, more easily get additional funding so that companies are enabled to avoid financial distress and show a negative influence of corporate social responsibility on financial distress. Previous research (Choi et al., 2021) concluded that CSR can reduce the possibility of increasing financial distress. Research from Nugrahanti, (2021) concluded that corporate social responsibility has a significant positive effect on financial distress. This indicates that when more companies disclose their CSR, it means that the company will have a low risk of experiencing financial distress. However, the results of research conducted Yanti & Purwanto, (2023) concluded that corporate social responsibility does not affect financial distress, which means that the existence of a high corporate social responsibility program cannot influence the company to experience financial distress. As previous research is presented, the following second hypothesis is proposed.

H₂: There is an effect of corporate social responsibility on financial distress

The Effect of Corporate Governance on Financial Distress

The existence of corporate governance can overcome agency problems between company owners and managers. As in research Hilaliya & Margaretha, (2017) concluded that the corporate governance index negatively and significantly affects financial distress. This indicates that if corporate governance is implemented properly, the possibility of financial distress can decrease, while research from Yuliani & Rahmatiasari, (2021) concluded that corporate governance has a positive and significant effect on financial distress, due to supervision that can improve performance. The results above contradict the research results from Nurulita et al., (2022) which concluded that corporate governance has a negative and insignificant effect on financial distress. This is because there are companies that implement corporate governance without being supported by efficient performance. In addition, this corporate

governance practice has not been implemented properly and correctly.

H₃: There is an effect of corporate governance on financial distress

Effect of Cash Flow on Financial Distress

Previous research from Giarto & Fachrurrozie, (2020) revealed that cash flow has a negative and significant effect on financial distress. These results are in line with researchers (Julius P.S et al., 2017). Thus, the higher the cash flow by the company, the later it can reduce the risk of the company experiencing financial distress. Meanwhile, according to research (Nasution, 2019) and Pandapotan & Puspitasari, (2022) revealed a positive influence given by cash flow on financial distress significantly, because it reflects the company's funding ability to predict the company's condition in financial distress. These results indicate that the higher the cash flow, the easier it is for the company to experience financial distress, if the company cannot manage cash appropriately.

H₄: There is an effect of cash flow on financial distress

The Effect of Firm Leverage on Financial Distress

Previous research from Giarto & Fachrurrozie, (2020) concluded that firm leverage has a positive and significant effect on financial distress. If a company has high leverage, it can cause the company to be at greater risk of financial distress, because its operational activities are financed by debt so that the company's ability to pay off debt and interest decreases. These results are in line with research by Kartika & Hasanudin, (2019) which concluded that firm leverage has a positive and significant effect on financial distress. As for companies with a higher debt ratio, the possibility of the company defaulting is caused by debt as a source of funding. Researchers stated (Shehzad et al., 2020) that firm leverage has a negative and significant effect on financial distress. If the company manages corporate debt well, it can have an effect on increasing company profits or profits. Therefore, the company has a smaller risk of financial distress.

H₅: There is an effect of firm leverage on financial distress

The Effect of Asset Tangibility on Financial Distress

Based on research from Isayas, (2021) which found the results that asset tangibility negatively and significantly affects financial distress. This indicates that companies with fixed assets are greater than current assets, so their financial condition is relatively good, so it is possible to avoid financial distress, because companies are able to increase production, so income also increases. The results are in line with the results of research Junior & Wijaya, (2022) by having asset tangibility, companies can focus on the business activities being carried out.

H₆: There is an effect of asset tangibility on financial distress.

The Effect of Corporate Governance as Moderation on Financial Distress

The results of research from Nugrahanti, (2021) which tests with corporate governance as moderation show that independent commissioners and institutional owners moderate the effect of corporate social responsibility disclosure on financial distress, while commissioner size does not moderate the effect of CSR disclosure on financial distress. Based on research from Farooq et al., (2023) Corporate governance found a significant relationship to financial distress. Results that support the idea that corporate governance mechanisms improve performance can protect shareholder rights. Effective governance mechanisms keep management under control, thus preventing the company from financial distress.

H₇: Corporate Governance moderates the effect of Corporate Social Responsibility on financial distress.

3. Method, Data, and Analysis

Data and Operational Variable

The sample withdrawal method used for this research is through purposive sampling. Considerations are taken because it will focus on specific objectives, namely companies with certain criteria. The sample of this study is a manufacturing company listed on the Indonesia Stock Exchange (IDX) during the 2019-2021 Period which has complete financial reports totaling 44 companies. The sample selection was carried out by paying attention to the sample criteria consisting of: (1) Manufacturing companies listed on the IDX during the 2019-2021 period. (2) Availability of company financial reports for the 2019-2021 period and in Rupiah currency. (3) Availability of data related to

measurements for the CSR ratio. (4) Companies that are not suspended by the IDX.

Table 1. Operational Variables

Variable Type	Variable Name	Operational variable definition	Reference
Dependent variable	Financial Distress	$Z_{Score} = 0.717X_1 + 0.847X_2 + 3.107X_3 + 0.42X_4 + 0.998X_5$	(Siregar & Nurlaila, 2023)
Independent variable	Financial Distress t_1	Z_Score value from previous year	Farooq et al., (2023)
Independent variable	Corporate Social Responsibility	Firm spending in Charitable donations, employee welfare, and Research Development / Earnings after tax	Farooq et al., (2023)
Independent variable	Corporate Governance	CG_Index	Farooq et al., (2023)
Independent variable	Cash Flow	Operating cash flow / Total assets	Pandapotan & Puspitasari, (2022)
Moderating variable	Corporate Governance	CG_Index	Farooq et al., (2023)
Control variable	Firm Leverage	Total debt / Total Assets	Farooq et al., (2023)
Control Variable	Asset Tangibility	Ratio of fixed assets to total assets	Farooq et al., (2023)

The independent variable is a variable that has an influence on changes that occur in the dependent variable, which is involved in the research, namely financial distress t_1 , Corporate Social Responsibility (CSR), Cash Flow, and Corporate Governance. The dependent variable is then interpreted to be a variable that receives influence or as a result of the independent variable, which in this study is financial distress. The moderating variables that arise in research to determine the effect (strengthen or weaken) given by the independent variable on the dependent variable. The moderating variable in this study is the role of corporate governance, with the control variable explained as a variable that is made constant by the researcher to minimize what can affect the dependent variable. This study contains control variables, namely firm leverage and asset tangibility. The following measurements of each variable are attached in table 1.

Research Analysis Method

This study will apply panel data regression through reviews 12. Panel data regression having 3 methods consisting of common effect, fixed effect, and random effect.

Model Specification Test

Chow Test

Table 2. Chow test results

		Chow Test		
Effects Test	Model	Prob.	Hypothesis	Conclusion
Cross- Section Chi-Square	Model 1 (Financial Distress)	0.000	Ha Accepted	Fixed Effects Model

Based on table 2 the results show that Prob. Cross-Section Chi-Square model 1 is 0.0002 <0.05, which means Ha is accepted. In conclusion, the best model to be selected in the study is the Fixed Effects Model, so it is necessary to test using the following Hausman test.

Hausman Test

The data results in table 3 have shown that Prob. Cross-Section Random model 1 is 0.008 <0.05, which means Ha is Accepted. So, the conclusion is proven that the Fixed Effects Model is the best model to choose. In addition, researchers use multiple linear regression tests to identify the effect that the dependent variable has on the independent variable, so it requires a coefficient of determination test and an F test, the following explanation.

Table 3. Hausman Test Results

		Hausman Test		
Effects Test	Model	Prob.	Hypothesis	Conclusion
Cross-Section Random	Model 1 (Financial Distress)	0.008	Ha Accepted	Fixed Effects Model

Determination Coefficient Test

Table 4. Test Results of the Coefficient of Determination

Coefficient of Determination			
Testing	Model		Value
Adjusted R-Squared	Model	1 (Financial Distress)	0.984

Based on the results in table 4 of the test, that Adjusted R-Squared model 1 is worth 0.9837 with a percentage of 98.37%, which indicates that all independent variables can be an explanation of 98.37% of the dependent variable, with the remaining 1.63% being explained through other variables that are not included in the model.

Simultaneous Test

Table 5. Simultaneous Test Results

Simultant Test (F-Test)				
Effects Test	Model	Prob.	Hypothesis	Conclusion
Prob. (F-Statistic)	Model 1 (Financial Distress)	0.0000	Ha Accepted	Significant Effect

Based on the test results in table 5, it appears that the Prob (*F-Statistic*) of model 1 is 0.000 < 0.05, which means Ha is accepted. So the conclusion is that all independent variables can simultaneously affect the dependent variable significantly, meaning that the regression model is feasible.

In order to identify the financial condition of manufacturing companies that are approaching financial distress, it can be done by using the altman z-score method. In general, companies that have a score above 2.99 are considered to be included as a safe zone, while companies with a Z-score in the range of $1.81 < Z < 2.99$ are considered to be included in the "gray zone" which means this time they have no problems in terms of finance but may face financial difficulties soon. Conversely, a Z-score of less than 1.81 is a "danger zone". The following linear equation of Altman Z - score is used:

$$Z_{\text{Score}} = 0.717X_1 + 0.847X_2 + 3.107X_3 + 0.42X_4 + 0.998X_5$$

Where X_1 : net working capital / total assets; X_2 : retained earnings / total assets; X_3 : EBIT / total assets; X_4 : market value of equity / book value of debt ; X_5 : sales revenue / total assets

Multiple Linear Regression Analysis

As in the conceptual framework that has been made in order to analyze the research, "The Effect of Cash Flow on Financial Distress and Corporate Social Responsibility moderated by the role of Corporate Governance", the equation model below is formed:

$$Z_{\text{score}_{it}} = \alpha + \beta Z_{\text{score}_{it-1}} + \beta_{1it-12} \text{ CSR ratio} + \beta_{it3} \text{ CG Index} + \beta_{it4} \text{ CF} + \beta \text{ LVRG} + \beta \text{ TANG}_{it5it6 it7} + \beta \text{ CSR ratio}_{it} * \text{ CG Index}_{it} + \epsilon_{it}$$

Where: $Z_{\text{score}_{it}}$ = Financial Distress; $(Z_{\text{score}_{it-1}})$ = Financial Distress of the previous period; CSR Ratio = Corporate Social Responsibility Expenditure; CG index = Corporate Governance; CF = Cash Flow; Lvg = Firm Leverage; Tang = Asset Tangibility; α = constant; ϵ = error.

4. Results

Descriptive Statistics

Table 6. Descriptive Statistics

Variables	Mean	Median	Maximum	Minimum	Std. Dev.
Financial Distress	1.240	1.118	3.545	-0.251	0.634
Financial Distress t ₋₁	1.332	1.253	3.920	-0.039	0.722
Corporate Social Responsibility	0.783	0.061	32.368	-2.980	3.965
Corporate Governance	34.488	28.639	97.600	11.669	14.634
Cash Flow	0.068	0.061	0.337	-0.173	0.090
Firm Leverage	29.123	28.951	32.820	25.689	1.793
Asset Tangibility	0.464	0.462	1.308	0.063	0.245
Corporate Social Responsibility Moderating	45.157	1.917	2,395.223	-69.699	268.414

The descriptive statistics are explained as a way or step in showing or describing data in the form of maximum, minimum, average and standard deviation values for each variable contained in the

study. As for some of the variables in question, including Financial Distress which is the dependent variable, with its independent variables consisting of CSR, Corporate Governance, Cash Flow, 2 Control Variables namely Leverage and Tangibility and 1 Moderation Variable namely Corporate Governance.

From the data in the table 6 shows the results of the maximum, minimum, median, mean or average value and standard deviation. Financial Distress obtained a mean or average value of 1.240, along with a median value of 1.118. Meanwhile, the maximum value is 3.545 which is the financial distress value. The minimum value is -0.251 which is the financial distress value. The standard deviation of financial distress is 0.634, or less than the acquisition of the average value (mean) shows the results of a small variable data distribution or no data gap. Financial Distress t_1 gets a mean or average value of 1.332 along with a median of 1.253. Meanwhile, the maximum value is 3.920 which is the value of financial distress t_1 . The minimum value is -0.034 which is the financial distress value of t_1 . The standard deviation of financial distress t_1 is 0.722 or still below the mean or average value, showing the results of a small variable data distribution or no data gap. Corporate Social Responsibility (CSR) obtained a mean or average value of 0.783 along with a median of 0.061. Meanwhile, the maximum value is 32.368 which is the CSR value. As for the minimum value is -2.980 which is the value of corporate social responsibility. The standard deviation of corporate social responsibility is 3.965 greater than the average value (mean) showing the results of a large variable data distribution or there is a data gap. Corporate Governance (CG) has an average (mean) value of 34.488 with a median of 28.639. Meanwhile, the maximum value is 97.600 which is the corporate governance value. As for the minimum value is 11.669 which is the corporate governance value. Then the standard deviation of corporate governance is 14.635 or still below the mean or average value, which shows the results of a small variable data distribution or no data gap. Cash Flow gets a mean or average value of 0.069 along with a median of 0.061. Meanwhile, the maximum value is 0.337 which is the cash flow value. The minimum value is -0.173 which is the cash flow value. Then the standard deviation of cash flow is 0.089652, or it can exceed the mean or average value, showing the results of a large variable data distribution or there is a data gap. Firm Leverage gets a mean or average value of 29.123 along with a median of 28.951. Meanwhile, the maximum value is 32.820 which is the firm leverage value. The minimum value is 25.690 which is the firm leverage value. The standard deviation of firm leverage is 1.793 smaller than the average value (mean) showing the results of a small variable data distribution or no data gaps. Asset Tangibility gets a mean or average value of 0.464 along with a median of 0.462. Meanwhile, the maximum value is 1.308 which is the value of the asset tangibility. The minimum is 0.063 which is the value of the asset tangibility. The standard deviation of asset tangibility is 0.245 or still below the mean or average value, showing the results of a small variable data distribution or no data gap. Corporate Social Responsibility (CSR) Moderating obtained a mean or average value of 45.157 along with a median of 1.917. Meanwhile, the maximum value is 2,395.223 which is the value of corporate social responsibility. The minimum value is -69.699 which is the moderating corporate social responsibility. The standard deviation of corporate social responsibility moderating is 268.414 or still exceeds the mean or average value and shows the results of a large variable data distribution or data gap.

Data Analysis

Hypothesis Test (t Test)

This test is intended to identify how much influence the independent variable has as an illuminator or explainer on the dependent variable. This test will be based on the probability value of the analysis results with reviews 12. When the probability value > 0.05 is obtained, it means that t count $< t$ table, and H_0 is accepted.

Table 7. Results of t-test Analysis

Fixed Effects Model Dependent Variable: Financial Distress					
Variables	Coefficient	Prob.	Hypothesis	Conclusion	
C	6.254	0.000			
Financial Distress t_1	0.590	0.000	Ha Accepted	Significant	
Corporate Social Responsibility	0.004	0.182	Ha Rejected	Not Significant	
Corporate Governance	0.003	0.004	Ha Accepted	Significant	
Cash Flow	-0.224	0.041	Ha Accepted	Significant	
Firm Leverage	-0.201	0.002	Ha Accepted	Significant	
Asset Tangibility	-0.125	0.226	Ha Rejected	Not Significant	
Corporate Social Responsibility Moderating	-0.001	0.001	Ha Accepted	Moderating	

From the data in the table 7 shows the results financial distress t_{-1} obtained a probability worth $0.000 < 0.05$, indicating that financial distress t_{-1} has a significant effect on financial distress. The following coefficient obtained is worth 0.590. Thus, the conclusion is that there is a significant positive effect of financial distress t_{-1} on financial distress. Corporate social responsibility obtained a probability of $0.182 > 0.05$, indicating that corporate social responsibility has no effect on financial distress. Thus, the conclusion is that there is no influence given by corporate social responsibility on financial distress. Corporate governance has a probability of $0.004 < 0.05$, indicating that corporate governance has a significant effect on financial distress. The following coefficient amount is 0.003. Thus, the conclusion is that there is a positive and significant effect of corporate governance on financial distress. Cash flow has a probability of $0.041 < 0.05$, indicating that cash flow has a significant effect on financial distress. The following coefficient amount is -0.224. Thus, the conclusion is that there is a significant negative effect of cash flow on financial distress. Firm leverage has a probability of $0.002 < 0.05$, indicating that firm leverage has a significant effect on financial distress. The following coefficient amount is -0.201. Thus, the conclusion is that there is a significant negative effect of firm leverage on financial distress. Asset tangibility gets a probability of $0.226 > 0.05$, indicating that asset tangibility does not affect financial distress. Thus, the conclusion is that there is no effect of asset tangibility on Financial Distress. Corporate social responsibility moderating obtained a probability of $0.001 < 0.05$. Thus, the conclusion is that there is moderation from corporate governance on the effect of Corporate social responsibility Moderating on financial distress.

Multiple Linear Regression Analysis

The results of processing with multiple linear regression statistics produce the following regression model equation provisions:

$$Z_score_{it} = \alpha + \beta Z_score + \beta_1 CSR\ ratio + \beta_2 CG\ Index_{it} + \beta_3 CF_{it} + \beta_4 LVRG + \beta_5 TANG_{it} + \beta_6 \epsilon_{it} + \beta_7 CSR\ ratio_{it} * CG\ Index_{it} + \epsilon_{it}$$

$$Z_score_{it} = 6.254181 + 0.590042Z_score_{it-1} + 0.004303CSR\ ratio_{it} + 0.003411CG\ Index_{it} - 0.224324CF_{it} - 0.200559LVRG_{it} - 0.125191TANG_{it} - 0.000147CSR\ ratio_{it} * CG\ Index_{it}$$

5. Discussion

Influence of Financial Distress^{t-1} on Financial Distress

Based on the results of his research, it is known that the financial distress variable is significant, so this variable has a positive effect on financial distress significantly. In line with the results of research by Nurulita et al., (2022) and Yazdanfar & Öhman, (2020) that in companies with lagged financial distress in the previous year, it can be a signal of financial distress in the company. This will affect the company's financial condition the following year. Therefore, management must pay attention to the company's finances so that financial conditions improve quickly, to avoid prolonged financial irregularities.

Corporate Social Responsibility on Financial Distress

Based on the results of his research, it is known that the corporate social responsibility variable is not significant. This means that the corporate social responsibility variable does not affect financial distress. In line with research from Yanti & Purwanto, (2023) it means that these results are companies that have higher programs in corporate social responsibility activities cannot affect companies experiencing financial distress. In addition, companies that are experiencing losses show that they are in the stage of financial pressure, so companies are more focused on improving their financial position and improving performance (Utami et al., 2021). If the company continues to carry out corporate social responsibility programs while under financial pressure, it will not result in financial distress in the company. The results are not in line with Nugrahanti, (2021) whose research has concluded that there is a positive effect of corporate social responsibility on financial distress significantly, which then indicates that the disclosure of corporate social responsibility from more and more companies can result in a higher risk of financial distress that the company will experience.

Corporate Governance on Financial Distress

Based on the results of his research, it is known that the corporate governance variable is significant, so that the corporate governance variable has a positive effect on financial distress

significantly. The results are in line with research Yuliani & Rahmatiasari, (2021) and Farooq et al., (2023). Then, these results mean that corporate governance affects financial distress. This study shows that financial distress is positively influenced by corporate governance, among others, due to external factors, management decisions, and company-specific conditions that can affect the company's financial condition independently of the quality of corporate governance implemented. In addition, companies are able to create goals and supervision that can improve performance and optimally. With an effective and well- controlled governance mechanism minimizes the occurrence of financial distress.

Cash Flow on Financial Distress

Based on the results of his research, it is known that cash flow is significant. But, indicating that cash flow has a negative effect on financial distress significantly. In line with research from Giarto & Fachrurrozie, (2020) and Julius et al., (2017). Financial distress can be negatively affected by cash flow. This cash flow is calculated from operating cash flow as a determinant of whether or not financial distress occurs in a company. Based on signaling theory, it is revealed that the higher the level of operating cash flow will illustrate that the company is able to meet the needs of internal cash so that it does not make loans externally and is able to maintain the company's operational capabilities, thereby increasing the company's value and reducing the risk of the company being exposed to financial distress. If the operating cash flow owned by the company is low and cannot use cash from internal indicates poor company performance, thus giving a negative signal to investors and creditors. The higher the operating cash flow, the less likely the company will experience financial distress. If the lower the level of operating cash flow of a company, it means that it will increase the possibility of the company getting into financial distress. This means that companies that generate cash positively are able to fulfill obligations on debt and guarantee company operations, and of course can avoid financial distress. Meanwhile, according to research (Nasution, 2019), and (Pandapotan & Puspitasari, 2022b)revealed a positive effect of cash flow on financial distress significantly.

Firm Leverage on Financial Distress

Based on the results of his research, it is known that firm leverage is significant. But, indicating that firm leverage negatively and significantly affects financial distress. This finding means that when the higher the funding carried out by the company with debt, it can reduce the possibility of the company being in financial distress. As for companies that use debt in their operations, it can increase the risk of financial distress, because it will be enough to affect the company's ability to continue to decline, due to debt and interest payments by the company. If the company can manage debt to carry out its operational activities as well as possible, it can improve the company's performance so as to generate profits by the company. thus, the company has a smaller risk of experiencing financial distress. However, this result is not in line with the results of research from (Rizky Kartika & Hasanudin, 2019), that there is a positive influence given by leverage on financial distress significantly.

Asset Tangibility on Financial Distress

Based on the results of his research, it is known that asset tangibility is not significant, so asset tangibility does not affect Financial Distress. in fixed assets incurs depreciation costs that reduce company profits and are less of a benchmark related to financial distress. When the company experiences declining profits and is able to pay its obligations with internal funding. The results of asset tangibility research are not in line with the results of research (Ikpesu & Eboiyehi, 2018), that there is a positive influence of asset tangibility on financial distress with significant, because asset tangibility can be used as collateral by companies so as to minimize the risk of financial distress.

Corporate Governance Moderates the Effect of Corporate Social responsibility on Financial Distress

Based on the results of his research, it is known that moderating corporate social responsibility is significant, then corporate governance can moderate the influence exerted by corporate social responsibility on Financial Distress. The results are in line with researchers Farooq et al., (2023) ,which indicate that if the higher the level of corporate governance owned by a company, it will cause a negative relationship between CSR and financial distress. Therefore, strong corporate governance can keep company management from over- investing in corporate social responsibility for personal gain, thus negatively affecting financial distress.

6. Conclusion, Limitations, and Suggestions

Conclusion

This study analyzes and examines the effect that cash flow has on financial distress and corporate social responsibility through moderation by the role of corporate governance. Financial Distress_{t-1} has a positive and significant effect on financial distress. Corporate Social Responsibility has no effect on financial distress. Corporate Governance has a positive and significant effect on financial distress. Cash flow has a negative and significant effect on financial distress. Leverage has a negative and significant effect on financial distress. Asset tangibility has no effect on financial distress. Corporate Governance moderates the effect of Corporate Social Responsibility on financial distress.

Limitation and suggestion.

The research that has been carried out still has limitations. Limitations on the use of variables that only determine the independent variables, which consist of financial distress_{t-1}, Corporate Social Responsibility, Cash Flow, and Corporate Governance with one dependent variable, namely financial distress and 2 control variables, namely firm leverage and asset tangibility and moderating variables, namely corporate governance, moderating the influence given by Corporate Social Responsibility on financial distress. The object of research only focuses on manufacturing companies listed on the IDX, so it cannot provide an overview other than manufacturing companies. This research applies a fairly short period of years, which is only for 3 years, between 2019 and 2021.

On the basis of the results of the following research discussion and also the limitations that researchers have put forward, so the suggestions that will be submitted to further research are 1). Can add variables that can also affect financial distress; 2). It is expected to be able to expand the scope of the object of research, so that it does not only focus on manufacturing companies; 3). Adding a research period to get more accurate research results, thus proving that the analyzed variables are able to detect the condition of companies experiencing financial distress.

References

- Adrian Wail Akhlah. (2019, December 2). Sri Mulyani reveals that agricultural SOEs are vulnerable to bankruptcy. *The Jakarta Post*.
- Akhmad Sigit Adiwibowo, Rohmah, D. S., & Nurmala, P. (2023). The Role of Financial Distress on Company Life Cycle and Stock Return. *JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi*, 10(2), 283–295. <https://doi.org/10.30656/jak.v10i2.6222>
- Choi, J. H., Kim, S., Yang, D.-H., & Cho, K. (2021). Can Corporate Social Responsibility Decrease the Negative Influence of Financial Distress on Accounting Quality? *Sustainability*, 13(19), 11124. <https://doi.org/10.3390/su131911124>
- Farooq, M., Noor, A., & Maqbool, N. (2023). How does corporate social responsibility affect financial distress? The moderating role of corporate governance. *Social Responsibility Journal*, 19(8), 1555–1573. <https://doi.org/10.1108/SRJ-08-2021-0353>
- Fitri Humairoh, & Suci Nurulita2. (2022). The Effect Of Corporate Governance On Financial Distress. *Jurnal Riset Akuntansi Kontemporer*, 14(2), 237–242.
- Foster, G. (1986). *Financial Statement Analysis*. New Jersey: Prentice Hall, Englewood Cliffs. Gailego, Gomes and Yanes, 1997. *Financial Distress and Corporate Governance: An Empirical Analysis*. . MCB University Press .
- Frans Julius P.S, Rita Anugerah, & Azhari Sofyan. (2017). Pengaruh Finacial Leverage, Firm Growth, Laba Dan Arus Kas Terhadap Financial Distress. *Jurnal Online Mahasiswa Fakultas Ekonomi* , 4(1).
- Giarto, R. V. D., & Fachrurrozie, F. (2020). The Effect of Leverage, Sales Growth, Cash Flow on Financial Distress with Corporate Governance as a Moderating Variable. *Accounting Analysis Journal*, 9(1), 15–21. <https://doi.org/10.15294/aaj.v9i1.31022>
- Gupta, K., & Krishnamurti, C. (2018). Does corporate social responsibility engagement benefit distressed firms? The role of moral and exchange capital. *Pacific-Basin Finance Journal*, 50, 249–262. <https://doi.org/10.1016/j.pacfin.2016.10.010>
- Hilaliya, T., & Margaretha, F. (2017). Peran Corporate Governance Dalam Menurunkan Kebangkrutan Pada Perusahaan Di Indonesia. *Jurnal Akuntansi*, 21(3), 391. <https://doi.org/10.24912/ja.v21i3.267>
- Ikpesu, F., & Eboiyehi, O. C. (2018). Capital structure and corporate financial distress of manufacturing firms in Nigeria. *Journal of Accounting and Taxation*, 10(7), 78–84.

- <https://doi.org/10.5897/JAT2018.0309>
- Isayas, Y. N. (2021). Financial distress and its determinants: Evidence from insurance companies in Ethiopia. *Cogent Business & Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1951110>
- Jonathan Robert Junior, & Henryanto Wijaya. (2022). Faktor-Faktor Yang Mempengaruhi Financial Distress Pada Perusahaan Manufaktur. *Jurnal Paradigma Akuntansi*, 4(2), 826–836. <https://doi.org/10.24912/jpa.v4i2.19583>
- Lee, J. E., Glasscock, R., & Park, M. S. (2017). Does the Ability of Operating Cash Flows to Measure Firm Performance Improve during Periods of Financial Distress? *Accounting Horizons*, 31(1), 23–35. <https://doi.org/10.2308/acch-51594>
- Nasution, S. A. (2019). Faktor yang Mempengaruhi Kondisi Financial Distress Perusahaan Property dan Real Estate. *Owner*, 3(1), 82. <https://doi.org/10.33395/owner.v3i1.97>
- Pandapotan, F., & Puspitasari, F. (2022a). The Effect of Cash Flow, Board Independence, and Company Size on Financial Distress. *Saudi Journal of Economics and Finance*, 6(9), 311–318. <https://doi.org/10.36348/sjef.2022.v06i09.003>
- Pandapotan, F., & Puspitasari, F. (2022b). The Effect of Cash Flow, Board Independence, and Company Size on Financial Distress. *Saudi Journal of Economics and Finance*, 6(9), 311–318. <https://doi.org/10.36348/sjef.2022.v06i09.003>
- Raden Roro Widya Ningtyas Soeprajitno, Zephyra Violetta Setiawan, & Ainun Na'im. (2023). Does Corpora Does Corporate Soci Te Social Responsibili Al Responsibility Discl Y Disclosure Increase The Stock Price Crash Risk? Evidence From Indonesia. *Jurnal Akuntansi Dan Keuangan Indonesia*, 20(1), 87–101.
- Rizky Dwi Melli Yanti, & Agus Purwanto. (2023a). Pengaruh Corporate Governance Dan Corporate Social Responsibility Terhadap Financial Distress. *Diponegoro Journal Of Accounting*, 12(12), 1–12.
- Rizky Dwi Melli Yanti, & Agus Purwanto. (2023b). Pengaruh Corporate Governancedan Corporate Social Responsibility terhadap Financial Distress. *Diponegoro Journal Of Accounting*, 12(2), 1–12.
- Rizky Kartika, & Hasanudin. (2019). Analisis Pengaruh Likuiditas, Leverage, Aktivitas, Dan Profitabilitas Terhadap Financial Distress Pada Perusahaan Terbuka Sektor Infrastruktur, Utilitas, Dan Transportasi Periode 2011-2015. *Jurnal Ilmu Manajemen*, 15(1).
- Samidi, S., Hakim, L., & Nurfadilah, D. (2019). The Role of Corporate Social Responsibilities (CSR) in Maximizing the Firm's Profitability for Sustainable Competitive Advantage. *International Academic Journal of Business Management*, 06(01), 259–269. <https://doi.org/10.9756/IAJBM/V6I1/1910027>
- Shehzad, K., Xiaoxing, L., & Kazouz, H. (2020). COVID-19's disasters are perilous than Global Financial Crisis: A rumor or fact? *Finance Research Letters*, 36, 101669. <https://doi.org/10.1016/j.frl.2020.101669>
- Siregar, S. P., & Nurlaila, N. (2023). Bankruptcy Analysis of Manufacturing Companies Registered on the Jakarta Islamic Index (JII) Based on the Altman Z-Score Method for the 2019-2021 Period. *Ekonomi, Keuangan, Investasi Dan Syariah (EKUITAS)*, 4(3), 996–1002. <https://doi.org/10.47065/ekuitas.v4i3.3127>
- Utami, E. F., Rahman, A., & Kartika, R. (2021). Corporate Social Responsibility, Financial Distress, Dan Siklus Hidup Perusahaan. *Ekonomis: Journal of Economics and Business*, 5(1), 106. <https://doi.org/10.33087/ekonomis.v5i1.289>
- Yazdanfar, D., & Öhman, P. (2020). Financial distress determinants among SMEs: empirical evidence from Sweden. *Journal of Economic Studies*, 47(3), 547–560. <https://doi.org/10.1108/JES-01-2019-0030>
- Yeterina Widi Nugrahanti*. (2021). Pengaruh Pengungkapan Corporate Social Responsibility terhadap Financial Distress Dengan Mekanisme Corporate Governance sebagai Pemoderasi. *Simposium Nasional Perpajakan*, 1, 45–60.
- Yuliani, R., & Rahmatiasari, A. (2021a). Pengaruh Corporate Governance terhadap Financial Distress dengan Kinerja Keuangan sebagai Variabel Moderating (Perusahaan Manufaktur di BEI). *Reviu Akuntansi Dan Bisnis Indonesia*, 5(1), 38–54. <https://doi.org/10.18196/rabin.v5i1.11333>
- Yuliani, R., & Rahmatiasari, A. (2021b). Pengaruh Corporate Governance terhadap Financial Distress dengan Kinerja Keuangan sebagai Variabel Moderating (Perusahaan Manufaktur di BEI). *Reviu Akuntansi Dan Bisnis Indonesia*, 5(1), 38–54. <https://doi.org/10.18196/rabin.v5i1.11333>