Corporate Governance Moderated Profitability, Liquidity and Cash Flow on Financial Distress

Agus Munandar & Eva Triyana*

Faculty of Economics, Esa Unggul University, Jakarta, Indonesia

Abstract

This study aims to determine the effect of Corporate Governance in moderating Profitability, Liquidity, and Cash Flow on Financial Distress. Net Profit Margin measures profitability. The Current Ratio measures liquidity. The Operating Cash Flow Ratio measures Cash Flow, and Altman Z-score measures Financial Distress. This study uses Corporate Governance as a moderating variable measured by the Board of Commissioners indicator. The sample used in this study is 156 data on manufacturing companies listed on the Indonesia Stock Exchange for 2020-2021. That year, there was an outbreak of the covid-19 pandemic that occurred almost all over the world, allowing many companies to experience financial distress problems. The hypothesis in this study was tested using multiple linear regression. The results showed that profitability had a significant positive effect on financial distress, while liquidity and cash flow had no significant effect on financial distress. Corporate governance as a moderating variable cannot strengthen the influence of Profitability, Liquidity, and Cash Flow on financial distress (Z-Score Index).

Keywords: corporate governance, financial distress, profitability, liquidity, cash flow.

1. Introduction

No matter how big or small, all companies can run into financial trouble or distress. The Covid-19 pandemic has caused significant changes to the entire order of life. The economic sector is no exception. Unfavorable economic conditions can cause financial distress problems for companies, causing many companies to be indicated as experiencing financial distress. The decline in a company's financial condition is usually one of the characteristics of a company experiencing financial distress before finally experiencing liquidation or bankruptcy. The last stage of a company's decline before it goes bankrupt or goes out of business is called “financial distress.” According to Platt & Platt (2002), knowing the condition from the start and whether the company is experiencing financial distress is hoped that preventive measures can be taken to anticipate these conditions that lead to bankruptcy.

After the Covid-19 pandemic spread almost all over the world, including Indonesia, many companies were experiencing financial distress problems. The COVID-19 pandemic has dramatically impacted all corporate sectors, including manufacturing. At least 58 manufacturing companies reported losses in their financial statements in 2020. This number decreased the following year after the pandemic to 39 manufacturing companies that reported losses in their financial statements in 2021.

![Figure 1. Profit and Loss Chart for Manufacturing Companies](source)

Of course, a company has a hope to be able to continue to run and develop in the long term. However, sometimes these goals do not always run as expected. At a certain point, the company may experience a financial decline so that

* Corresponding author.
E-mail address: treva.idn@gmail.com
it experiences financial difficulties, which can ultimately lead to bankruptcy. Financial trouble can be caused by things inside or outside the company. In recent years, the world's economic conditions have been unstable, which has also impacted Indonesia's economic conditions. This instability was caused by the economic slowdown that occurred due to the COVID-19 pandemic, causing economic instability. This phenomenon is a challenge for Indonesia and a threat to achieving economic growth targets. Therefore, companies must be able to overcome these conditions in order to survive in the business world and can continue to advance and develop.

Many companies experienced losses in 2020-2021, one of which was due to the covid pandemic, which slowed down the movement of the economy in Indonesia. Not a few companies went bankrupt and merged because they could not survive the pandemic. One thousand two hundred ninety-eight companies filed for bankruptcy to the Indonesian Employers Association (Apindo) in three semesters in 2021 (Nurhadi M, 2021). In addition, not a few companies are conducting mergers and acquisitions in order to survive during the pandemic. The companies acquired in 2021 include, PT. Indomobil Multi Jasa Tbk (IMJS), PT. Medco Energi Internasional Tbk (MEDC), PT. Harum Energy Tbk (HRUM) and PT. Indofood CBP Sukses Makmur Tbk (ICBP). Then PT Indika Energy Tbk (INDY), PT Duta Pertiwi Tbk (DUTI), PT Bank Rakyat Indonesia (Persero) Tbk (BBRI), PT Tower Bersama Infrastructure Tbk (TBIG), and PT Energi Mega Persada Tbk (ENRG). This year's mergers include PT Bank Syariah Mandiri, PT Bank BNI Syariah, and PT Bank BRI Syariah Tbk to become PT Bank Syariah Indonesia Tbk (BRIS). There was also a merger between PT Hutchison 3 Indonesia and PT Indosat Tbk (ISAT) (Investor, 2021). This phenomenon is one of the reasons for researchers to find out the problems of financial distress or financial difficulties that occur so that they can be prevented and handled correctly to avoid bankruptcy or liquidation.

Corporate governance is one of the most critical factors in a company. With good corporate governance, the company will have high competitiveness to attract investors to invest in their shares. For a company to survive in the business world, various factors influence it. According to Porter (2007), the strategy adopted by the company can be the reason why the company can succeed or fail. One of the strategies that can be applied in the company to achieve its goals is to implement good corporate governance. The implementation of corporate governance is an integral part of the company's internal environment because corporate governance supports the realization of the condition of the organization or company to be healthy and perform well. The implementation of corporate governance is essential in encouraging good economic growth in the future, especially in Indonesia, which has just entered the endemic phase after the new normal that took effect due to the pandemic. By applying the principles of good corporate governance, it is hoped that the company can avoid financial distress problems.

Information about financial distress is vital, especially for investors and creditors. Investors certainly do not want to invest in companies likely to be experiencing financial distress. One of the signs of a company experiencing financial distress is when the company is experiencing a decline in financial condition. The decline in financial conditions occurred before the company went bankrupt. In addition, signs of a company experiencing financial distress can also be seen from the loss profit report of a company that occurred over several periods. If the company suffers a loss in its business, the users of financial statements will predict that the company is experiencing financial distress or financial difficulties. If there is a problem of financial distress, if it is detected and not immediately appropriately handled, then the initially minor financial difficulty can become a more severe financial difficulty, and the worst thing is the occurrence of bankruptcy or liquidation. To minimize or reduce the impact and risk of bankruptcy, the company at least needs to analyze to predict whether or not the company may experience financial distress and analyze the factors that influence financial distress.

One way to analyze financial distress is to look at a company's Net Profit Margin (NPM). According to Kasmir (2016), the average standard of net profit margin for the industry is 20%, so if the situation is not immediately addressed, it is feared that the company will experience financial distress. Net Profit Margin (NPM) in the profitability ratio measures the percentage of net profit compared to net sales in a company. With a high NPM, the company is considered to be in a healthy financial condition because it is close to the targeted sales value to avoid financial distress problems. The liquidity Ratio can also be used to assess a company's financial distress condition. According to Platt & Platt (2002), the liquidity ratio can predict financial distress with a negative coefficient. The liquidity ratio is a ratio that shows the company's ability to pay its current or short-term obligations. If the company's liquidity level is high, it indicates that the company has sufficient current assets to be used to pay its current debt. That way, the company can avoid financial distress problems. In addition to looking at the ratio of profitability and liquidity, cash flow from operating activities can also be used to see if the company is experiencing financial distress that leads to bankruptcy. Cash flow from operating activities shows the condition of a company's daily cash expenditures and receipts. If expenses are more than income, it indicates an unhealthy cash condition. It can happen if the debt is not
paid. Suppose the operating cash flow at the receipt of a company is high. In that case, it indicates that the company's cash is healthy because the revenue can cover all daily company financing, and the company can avoid financial distress problems. With a healthy cash condition, the company will be sufficient to finance its daily activities in operating, such as paying short-term obligations, paying dividends, and so on.

Financial distress is critical because it will describe the company's financial condition. Especially with the covid-19 pandemic, many companies are affected by the outbreak. By knowing the condition of financial distress, the company will make every effort and be more careful in considering and taking company policies to reduce the impact of financial distress. It encourages various studies to be carried out using various variables and research samples to obtain information about financial distress in a company that aims to test. Reflecting on these problems, the author wants to know the condition of Financial Distress seen from the Ratio of Profitability, Liquidity, and Cash Flow with Corporate Governance as moderator.

Profitability as measured by NPM has a significant negative effect on financial distress (Indrati & Putri, 2021), while according to Yuniarti (2012), NPM does not affect the possibility of financial distress. (Profitabilitas et al., 2019) said that the Liquidity Ratio measured by the current ratio had a significant effect on financial distress, while according to (Yuniarsih & Permatasari, 2020), the Current Ratio did not affect financial distress. Naurah Fakhriyah Amanda & Muhamad Muslih (2020) said that operating cash flow significantly affected financial distress, while (No Title, 2016) Dyah Arditi Domas Purnamawati (2019) said that operating cash flow did not affect financial distress. Retno (Mulansari & Setiyorini, 2019) said that corporate governance, as measured by managerial ownership, significantly affects financial distress. The Literature Study also reinforces this by (Alexandra et al., 2022), which says that most good corporate governance variables affect the company's financial problems.

Based on these studies, various companies have mixed results in predicting financial distress. It becomes the motivation in this study to examine different variables and objects. In this study, there are differences, namely research variables, type of company, and the year of research to be studied, namely 2019-2021. Where these years are the year, the COVID-19 pandemic occurred almost all over the world, causing many companies to experience financial distress problems. The researcher intends to use Net Profit Margin, Current Ratio, and Net Operating Margin as Independent Variables, with Corporate Governance used as moderating variables. Manufacturing companies are used as the population because manufacturing companies are one of the categories of companies most affected by the COVID-19 pandemic. This study aims to determine the condition of financial distress seen from profitability, liquidity, and cash flow with corporate governance as moderating.

2. Literature Review

2.1. Signaling Theory

Signaling Theory or Signal Theory was first put forward by Spence (1973). Spence (1973) developed the thinking of Akerlof (1970), who introduced the term information asymmetry (asymmetric information). Spence (1973) states that the sender or owner of the information will try to provide a signal or relevant piece of information that can be useful to the recipient. According to Brigham and Houston (2014), signaling theory is an action taken by company management to give a signal, signal, or hint about the company's prospects to investors for the future. The theory mainly focuses on the intention of company management in providing information and receiving back signals or feedback (feedback) from the community, market, and stakeholders.

The existence of information asymmetry between the company and outside parties encourages companies to provide information. It is because the company knows more about the prospects of the company than outside parties such as creditors and investors. It makes the basis that signaling theory or signal theory is needed to explain a company's financial distress condition to outsiders.

2.2. Contingency Theory

The contingency theory was first proposed by Lawrence and Lorsch (1967). Furthermore, the theory was used by Katz and Rosenzweig (1973). Katz and Rosenzweig (1973) stated that there is no best way to achieve conformity between organizational and environmental factors to obtain good performance for an organization. Contingency theory is a concept that states that no one best control system can be applied to all organizations. Applying the right system must consider the involvement of contextual variables in which the organization is located. Contingency theory provides
opportunities for other variables to become moderators that can affect profitability, liquidity, and cash flow in predicting financial distress in a company.

From the explanation, we can conclude that the contingency theory is a situation where these conditions can occur but may also not. Therefore, this contingency theory can be used to solve problems due to differences in previous studies. With the contingency theory approach, it is expected to be able to develop other variables to get different results than before by adding a moderating variable. The addition of moderating variables is used to combine between variables. The moderating variable is a variable that can weaken or strengthen the relationship between one variable and another. In this study, researchers tried to use corporate governance as a moderating variable. Good Corporate Governance was chosen because corporate governance is one of the most critical things in the company’s survival. Good governance supports the company to be excellent and healthy to avoid financial distress.

2.3. Profitability

Kasmir (2016) said, “The profitability ratio is a ratio to assess the company's ability to seek profit.” The ability of a business to turn a profit, as evidenced by its sales volume, is known as profitability. The profitability ratio used in this study is the Net Profit Margin. According to Hanafi (2016), “Profit Margin calculates the amount of which the company can generate net profit at a certain level of sales.” The ratio that a corporation uses to gauge its capacity to produce a net profit is known as the net profit margin. This ratio is obtained by comparing the operating profit with the company’s sales. The higher the ratio value obtained, it indicates that the company's profitability is getting better. According to Kasmir (2016), Net Profit Margin or net profit margin is a measure of profit by comparing profit after interest and taxes to sales. The higher Net Profit Margin ratio makes the company more efficient in its operations. The Net Profit Margin, according to Hanafi (2016), can be formulated as follows:

Net Profit Margin (NPM) = Net Profit / Sales

2.4. Liquidity

According to Kasmir (2016) says that “Liquidity ratio is a ratio that describes the company's ability to meet short-term obligations (debt)”. In this study, the Liquidity Ratio is the Current Ratio or Current Ratio. One liquidity ratio used to assess a company's capacity to settle short-term obligations or debts that are due immediately upon billing is the current ratio (Kasmir, 2016). The ability of the company to pay off its current debt obligations increases as the ratio value increases. The current ratio is the most commonly used ratio measure to determine the ability to meet the company's short-term obligations. The current ratio shows whether the demands to pay short-term obligations from creditors can be met by current assets in the same period as the maturity of the debt. A low current ratio indicates a problem in the company's liquidity and vice versa. If the current ratio is too high, it is also considered less good because it is less effective in using assets characterized by a large number of idle funds, so it can reduce the company's ability to generate profits. According to Kasmir (2016), the Current Ratio (CR) can be calculated by:

Current Ratio (CR) = Current Assets / Current Liabilities

2.5. Cash Flow

According to the Indonesian Institute of Accountants (2017), “Cash flow is the inflow and outflow of cash equivalents.” According to Harvard Business School, cash flow is the net balance of cash that has entered and cash that has gone out at a specific time. Meanwhile, according to the Big Indonesian Dictionary (KBBI), cash flow is a company’s cash expenditure and income based on weekly, daily, and other periods. Cash flow from operating activities is a determining indicator in a company whether the company can generate sufficient cash flow to maintain the company’s operating capabilities, make new investments, pay dividends and repay loans without relying on outside funding sources. According to the Indonesian Institute of Accountants (2017), “Operating activities are the main income generating activities of the entity and other activities that are not investing activities and financing activities.” According to Darsono and Ansari (2011), the formula for the Operating Cash Flow Ratio (AKO) is as follows:

Cash flow from operating activities = Total Operating Cash Flow / Current Liabilities
2.6. Good Corporate Governance

According to the (FCGI) Forum for Corporate Governance in Indonesia, what is meant by corporate governance or GCG is a regulation or system that controls and regulates a company to create added value for stakeholders related to the rights and obligations of these stakeholders. The corporate governance indicator used in this study is the size of the board of commissioners. Based on UURI No. 40 of 2007 concerning Limited Liability Companies, it is defined that the board of commissioners is an organ of the company which has the task of conducting general or specific supervision by the articles of association and providing advice to the Board of Directors.

The board of commissioners helps establish prohibitions, sanctions, and obligations that workers must obey to become a guideline or guide for all workers in carrying out their work (Mulyadi, 2013). The board of commissioners will determine the strategy or what policies will be taken by the company in the long term and the short term. So it can be concluded that the board of commissioners is part of the company, which has the task of supervising the company and ensuring that it carries out good corporate governance. According to Sembiring (2005), the size of the board of commissioners is the total number of members of the board of commissioners in a company. So that the size of the board of commissioners can be measured using the formula:

Size of the Board of Commissioners = Number of the Board of Commissioners

2.7. Financial Distress

According to Hanafi (2014), “Financial Distress can be described from two extreme points, namely, from short-term liquidity to insolvable (debt is greater than assets). Short-term financial difficulties are usually temporary but can develop to be worse”. Financial distress is when the company finds it difficult to fulfill its obligations because it has decreased profits (Baldwin & Scoot, 1983). Companies that experience a decrease in profits or profits even though they are relatively small in value can be classified into financial distress. Financial distress is when the company's finances are in an unhealthy or financial crisis.

Financial distress usually occurs before the company goes into liquidation or bankruptcy. McCue (1991) calls this negative cash flow financial distress. Lau (1987) and Hill et al. (1996) say that companies experiencing financial distress will terminate their employment and eliminate dividend payments. One of the measurements used to see the condition of Financial Distress is the Altman Z-Score method. The first discriminant function estimated by Altman (1968) is:

\[ Z = 1.2T_1 + 1.4T_2 + 3.3T_3 + 0.6T_4 + 0.999T_5 \]

Where each of the T coefficients means:

- \( T_1 \) = Working capital/Total assets
- \( T_2 \) = Retained Earnings/Total Assets
- \( T_3 \) = Earnings before interest and taxes (EBIT)/Total assets
- \( T_4 \) = Market value of equity /Total liabilities
- \( T_5 \) = Revenue/Total assets

There are 3 assessment categories for the Z-Score Index, namely:

- If \( Z > 3.00 \) = “safe / non-financial distress” zone, there is a small chance of going bankrupt.
- If \( 1.81 < Z < 2.99 \) = “cautionary zone / Gray Zone,” it means that there is a financial condition in a section that requires special attention.
- If \( Z < 1.80 \) = “financial distress” zone, which means the company has a solid potential to go bankrupt.

2.8. Relationship Between Variables

2.8.1. Relationship between Profitability and Financial Distress

If a company's profitability is high, it tends not to experience financial difficulties. If the company can generate high profits, it can successfully achieve its sales targets. It can affect investors' decisions to invest in the company because with high profitability, and the company will be able to distribute dividends to investors and avoid financial distress
problems. One conclusion is that the likelihood of the business going through a period of financial hardship is inversely proportional to the net profit margin. A sizeable net profit margin improves the company's capacity to make money and fend off issues of financial distress. So the research hypothesis is as follows:

H1: Profitability has a significant positive effect on Financial Distress (Z-Score Index).

2.8.2. Relationship between Liquidity and Financial Distress

Liquidity can be measured using the current ratio. The current ratio determines whether or not the corporation can satisfy its short-term commitments with the assets it now has. It indicates that the greater the ratio value, the greater the company's ability to fulfill its upcoming obligations.

According to Kasmir (2016), the large value of the current ratio opens the opportunity to obtain capital without going through new obligations to increase income. Conversely, the lower current ratio means that the company owns only a few assets to meet its short-term debt, so the risk of default will be high, and the risk will affect the possibility of increasing the company's financial distress. In connection with the theory of Bringham and Houston (2001), if current debt increases significantly than current assets, it results in a decrease in the current ratio, which causes problems so that the pattern of the relationship between the current ratio and financial distress may be negative, meaning that the higher the current ratio value, the lower the company will experience financial distress, and vice versa. The lower the value of the current ratio, the higher the company can experience financial distress. Based on the theory and previous research, the hypotheses of this research are as follows:

H2: Liquidity has a significant positive effect on Financial Distress (Z-Score Index).

2.8.3. Relationship between Cash Flow and Financial Distress

If the cash flow is of small value to a company, then creditors/lenders such as banks do not have confidence in taking credit given or proposed. If this happens continuously, the creditor/lender will not re-entrust his credit to the company because it is considered that the company is experiencing financial distress or financial problems.

The total number of the company's cash flow ratio should increase over time because it shows the company's financial growth. If a company's cash flow continues to show negative cash flows, then the company suffers losses that can make the company experience financial distress. On the other hand, a company that shows positive cash flow regularly indicates that the company is continuously developing from time to time. It means that the Financial Distress of a company is lower when the cash flow ratio is higher and vice versa. So, the research hypothesis is as follows:

H3: Cash Flow significantly positively affects Financial Distress (Z-Score Index).

2.8.4. Relationship between Profitability and Financial Distress with Corporate Governance as a moderating variable

Good corporate governance strengthens the company's position and increases competitiveness. The indicator of corporate governance used in this research is the number of the Board of Commissioners. The greater the number of the board of commissioners, the more effective the management supervision will be to avoid the possibility of financial distress. If corporate governance in the company increases, profitability also increases. If profitability increases, the Altman Z Score Index will also increase, causing a decrease in the possibility of financial distress in the company. If a company's profitability is high, it tends not to experience financial difficulties. If the company can generate high profits, it can successfully achieve its sales targets. It can affect investors' decisions to invest in the company because with high profitability, and the company will be able to distribute dividends to investors and avoid financial distress problems. Thus it can be said that the higher the number of commissioners in the company, the higher the profitability. If profitability increases, the Altman Z-Score Index will also increase, so the possibility of the company experiencing financial distress will be lower. Based on this, the moderating variable hypotheses in this study are:

H4: Corporate Governance strengthens the influence of Profitability on Financial Distress (Z-Score Index).
2.8.5. Relationship between Liquidity and Financial Distress with Corporate Governance as a moderating variable

If corporate governance in the company increases, liquidity will also increase. If profitability increases, the Altman Z Score Index will also increase, causing a decrease in the possibility of financial distress in the company. Suppose the liquidity in a company is high. In that case, it tends not to experience financial difficulties because the greater the value of the current ratio, the greater the company's ability to pay debts that will soon be due to avoid the possibility of financial distress. It can affect investors' decision to invest their capital in the company. Thus, it can be said that the higher the number of commissioners in the company, the higher the liquidity value, so the Altman Z-Score Index will also increase and cause the company to experience financial distress. Based on this, the moderating variable hypotheses in this study are:

H5: Good Corporate Governance strengthens the influence of Liquidity on Financial Distress (Z-Score Index).

2.8.6. Relationship of Cash Flow to Financial Distress with Corporate Governance as a moderating variable

Cash Flow describes the amount of cash obtained and issued by the company in a certain period. If the amount of revenue is more than the amount of expenditure, it can be said that the company's cash flow is smooth and vice versa. If the amount of revenue is small, it needs special attention because the company will find it difficult to finance its daily needs, which can cause financial distress. If there are more boards of commissioners in corporate governance, the supervision carried out will also be more effective so that the company can avoid the possibility of financial distress and vice versa. The performance of the board of directors can be monitored with a large number of commissioners so that the level of fraud on the effectiveness and efficiency of the company is getting smaller. Thus, it can be said that the greater the number of the board of commissioners, the stronger the influence of liquidity on financial distress. It is because the greater the number of boards of commissioners in corporate governance, it will strengthen cash flow so that the Altman Z-Score Index will also increase and cause a lower probability of the company experiencing financial distress. Based on this understanding, the moderating variable hypotheses in this study are:

H6: Good Corporate Governance strengthens the influence of Cash Flow on Financial Distress (Z-Score Index).

2.8.7. Research Framework

The research framework describes the relationship between Profitability, Liquidity, and Cash Flow in Financial Distress, with Corporate Governance as a modifying variable.

Figure 2. Research Framework (in Indonesia)
3. Research Methodology

3.1. Place and Time of Research

This research took place from April 2022 until it was complete and was carried out by the authors in various areas that supported the literature study, including also carried out on the Indonesia Stock Exchange (IDX) or the Indonesian Stock Exchange (IDX).

3.2. Types and Sources of Data

Quantitative data are the type of data used in this study. Data in the form of numbers, which is quantitative data, can be calculated or measured directly. Sources of data used are secondary data and library data. The secondary data used is financial statement data obtained through the company's annual reports found on the official website of each company, as well as those listed on the Indonesia Stock Exchange (IDX). The library data is obtained through reading books, theories, and journals from various sources related to this research.

3.3. Population and Sampling Techniques

In this study, the population used are manufacturing companies listed on the IDX (Indonesian Stock Exchange). The sample selection in this study uses the purposive sampling method with the following conditions: [1] Manufacturing companies listed on the IDX. [2] The company has published an annual report as of December 2021. [3] Financial statements are in IDR. The following is a calculation of the total sample used based on these criteria:

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing company listed on IDX</td>
<td>178</td>
</tr>
<tr>
<td>2</td>
<td>Companies that have not published financial statements of December 2021</td>
<td>-75</td>
</tr>
<tr>
<td>3</td>
<td>Companies that have published financial reports as of December 2020-December 2021</td>
<td>103</td>
</tr>
<tr>
<td>4</td>
<td>Companies that do not present in Rupiah</td>
<td>-25</td>
</tr>
</tbody>
</table>

**Total Research Sample** | 78

**Research Period 2020-2021 = 2 years x 78 companies** | 156

3.4. Data Analysis Techniques

This study uses quantitative data analysis as its approach for analyzing the data. According to Sugiyono (2018), quantitative data analysis techniques are activities after collecting data from all respondents (population/sampling).

3.5. Descriptive Statistics

Descriptive statistics examine data by summarizing or describing the acquired data without aiming to draw conclusions that apply to the broader public or generalizations (Sugiyono, 2018). Descriptive statistics are used to describe the variables in this study. The descriptive statistical test determines how the data is described in general terms.

3.6. Classic assumption test

If a linear regression model meets the classical assumptions, it can be called a good model. So, we need to do a classic assumption test before doing regression analysis. This study uses normality, multicollinearity, and heteroscedasticity tests to see if the assumptions are valid. According to Ghozali (2016), the normality test determines whether or not a data distribution is normal. A reliable regression model has a normal distribution or one close to normal. The multicollinearity test aims to test whether the regression model found a correlation between independent variables (Ghozali, 2016). A reliable regression model should have no correlation with the independent variables.
Heteroskedasticity test aims to test whether, in the regression model, there is an inequality of variance from the residuals (Ghozali, 2016). There should be no heteroscedasticity in a good regression model.

3.7. Hypothesis test

Hypothesis testing used in this research uses multiple linear regression analysis. According to Sugiyono (2016), multiple linear regression analysis is a regression analysis that has one dependent or dependent variable and two or more independent or independent variables. Multiple linear regression analysis was carried out to determine whether the direction of a study was positive or negative and to find out how much influence the independent variables had on the dependent variable (Ghozali, 2018). The multiple linear regression equations in this study are:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_1^*Z + \beta_5 X_2^*Z + \beta_6 X_3^*Z + e \]

Notes:
- \( Y \) : Financial Distress
- \( \alpha \) : Constant
- \( \beta \) : Directional number or regression coefficient
- \( X_1 \) : Profitability
- \( X_2 \) : Liquidity
- \( X_3 \) : Cash Flow
- \( Z \) : Corporate Governance
- \( e \) : Error

4. Results and Discussion

4.1. Overview of Research Objects

Based on the purposive sampling method described previously, there are 78 companies as samples in this study. However, after collecting data, 15 companies had outlier data, so the total selection of companies used in this study amounted to 63 companies with the period used, namely 2020 - 2021.

4.2. Index Altman Z-score

Based on the calculation of the Altman z-score method, the following categories of companies are likely to experience financial distress and companies that are likely to avoid financial distress problems.

![Figure 3. Altman Z-Score Index](source)

From Figure 3, 13 companies were experiencing financial distress in 2020, and by 2021 there were 15 companies. The increasing number of companies experiencing financial distress is also followed by an increase in companies in the safe category or not experiencing financial distress, namely 31 companies in 2020 to 36 companies in 2021. For companies in the “grey area” in 2020, 19 companies decreased to 12 companies in 2021.
4.3. Descriptive Statistics

The results of descriptive statistics totalling 126 company data shown on Table 2.

<table>
<thead>
<tr>
<th>Table 2. Statistical Descriptive Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive Statistics</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Profitability</td>
</tr>
<tr>
<td>Liquidity</td>
</tr>
<tr>
<td>Cash Flow</td>
</tr>
<tr>
<td>Corporate Governance</td>
</tr>
<tr>
<td>Financial Distress</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

4.3.1. Profitability (X1)

Based on table 2, the minimum value of profitability is -8.27% owned by PT. Asia Pacific Investama in 2020, the maximum value of 19.30% is PT. Ultrajaya Milk Industry and Trading Company in 2021 with std. deviation of 5.72646 is smaller (<) than the mean of 5.9842, which means that the data is heterogeneous and has a low deviation rate.

4.3.2. Liquidity (X2)

Based on table 2, the minimum liquidity value is 0.35, which PT Asia Pacific Investama owned in 2021, and the maximum value of 24.80 is PT. Kirana Megatara in 2021 with std. deviation of 3.09609 is greater (>) than the mean of 2.9758, which means that the data is homogeneous or the data distribution is not so large.

4.3.3. Cash Flow (X3)

Based on table 2, the minimum cash flow value is -2.59, which PT Kirana Megatara owned in 2021, and the maximum value of 3.58 is PT. Campina Ice Cream Industry in 2020 with std. deviation of 0.78465 is greater (>) than the mean, which is 0.5210, which means that the data is homogeneous or the data distribution is not so large.

4.3.4. Corporate Governance (Z)

Based on table 2, the minimum value of corporate governance is 2 owned by companies with codes CAKK, EKAD, IMPC, PBID, SMFM, BELL, COCO, ITIC, and MERK. The maximum value of 10 is a company with an ASII code. As for std. deviation of 1.96542 is smaller (<) than the mean of 4.4286, which means that the data is heterogeneous and has a low deviation rate.

4.3.5. Financial Distress (Y)

Based on table 2, the minimum value of financial distress is -1.09, which PT Asia Pacific Investama owned in 2020, and the maximum value of 9.60 is PT. Perfect Congratulations on 2020 with std. deviation of 2.41353 is smaller (<) than the mean of 3.8223, which means that the data is heterogeneous and has a low deviation rate.

4.4. Classical Assumption Test

4.4.1. Normality test

The results of normality testing based on One-Sample Kolmogorov Smirnov shown on Table 3.

Based on table 3, the Asymptotic Significance value is 0.078 or the value is greater than 0.05 (0.078 > 0.05). So the research data is normally distributed.

4.4.2. Multicollinearity Test

The results of the multicollinearity test are seen from the Tolerance and VIF values (Table 4).
Based on table 4, the Profitability Tolerance value is 0.916, Liquidity is 0.934, Cash Flow is 0.826, and Corporate Governance is 0.957 or > 0.10, which means that there is no multicollinearity. In addition, it can be seen from the VIF value where profitability is 1.092, Liquidity is 1.070, Cash Flow is 1.210, and Corporate Governance is 1.045 or < 10, which means that there is no multicollinearity.

**Table 3. One-Sample Kolmogrov-Smirnov Test**

<table>
<thead>
<tr>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>Normal Parameters𝑎,𝑏</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
</tr>
<tr>
<td>Absolute</td>
</tr>
<tr>
<td>Positive</td>
</tr>
<tr>
<td>Negative</td>
</tr>
<tr>
<td>Test Statistic</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)𝑐</td>
</tr>
<tr>
<td>Sig.</td>
</tr>
<tr>
<td>Monte Carlo Sig. (2-tailed)𝑑</td>
</tr>
<tr>
<td>99% Confidence Interval</td>
</tr>
<tr>
<td>Lower Bound</td>
</tr>
<tr>
<td>Upper Bound</td>
</tr>
</tbody>
</table>

**Table 4. Multicollinearity Test Results**

<table>
<thead>
<tr>
<th>Coefficientsª</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>0.916</td>
</tr>
<tr>
<td>1 Liquidity</td>
<td>0.934</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>0.826</td>
</tr>
<tr>
<td>Corporate Governance</td>
<td>0.957</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Financial Distress

4.4.3. Heteroscedasticity Test

The result of Heteroscedasticity testing seen from the Scatterplot graph (Figure 4).

![Figure 4. Heteroscedasticity Test Results (Scatterplot)
Based on the scatterplot graph on Figure 4, the points do not form a certain pattern, which means that the regression model is free from heteroscedasticity. In addition to testing with a scatterplot, testing can also be done using the Glejser method. The following is the result of heteroscedasticity testing using the Glejser method.

### Table 5. Heteroscedasticity Test Results (Glejser)

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.823</td>
<td>0.320</td>
<td>0.119</td>
<td>5.699</td>
<td>0.000</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.026</td>
<td>0.020</td>
<td>0.032</td>
<td>1.285</td>
<td>0.201</td>
</tr>
<tr>
<td>Liquidity</td>
<td>0.013</td>
<td>0.037</td>
<td>0.034</td>
<td>0.348</td>
<td>0.729</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>0.053</td>
<td>0.154</td>
<td>-0.169</td>
<td>-1.872</td>
<td>0.064</td>
</tr>
<tr>
<td>Tata Kelola Perusahaan</td>
<td>-0.107</td>
<td>0.057</td>
<td>-0.169</td>
<td>-1.872</td>
<td>0.064</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ABS_RES

Based on the table 5, the significance values are 0.201, 0.731, 0.729, and 0.064, or the value is greater (> ) than 0.05, which means that the regression model does not contain heteroscedasticity. So the conclusion is regression models free from heteroscedasticity.

### 4.5. Multiple Linear Regression Analysis

The results of multiple linear regression analysis with profitability, liquidity, and cash flow as independent variables, financial distress as the dependent variable, and corporate governance as a moderating variable shown on Table 6.

### Table 6. Multiple Linear Regression Analysis

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.377</td>
<td>0.337</td>
<td>0.894</td>
<td>7.05</td>
<td>0</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.377</td>
<td>0.073</td>
<td>0.849</td>
<td>5.152</td>
<td>0</td>
</tr>
<tr>
<td>Liquidity</td>
<td>0.062</td>
<td>0.179</td>
<td>0.080</td>
<td>0.347</td>
<td>0.729</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>-0.336</td>
<td>0.660</td>
<td>-0.109</td>
<td>-0.510</td>
<td>0.611</td>
</tr>
<tr>
<td>Profitability*CG</td>
<td>-0.044</td>
<td>0.015</td>
<td>-0.511</td>
<td>-2.900</td>
<td>0.004</td>
</tr>
<tr>
<td>Liquidity*CG</td>
<td>0.008</td>
<td>0.025</td>
<td>0.073</td>
<td>0.335</td>
<td>0.738</td>
</tr>
<tr>
<td>Cash Flow*CG</td>
<td>0.114</td>
<td>0.136</td>
<td>0.169</td>
<td>0.841</td>
<td>0.402</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Financial Distress

Based on the table above, the regression equation is obtained as follows:

\[
Y = 2.377 + 0.377 X_1 + 0.062 X_2 + (-0.336) X_3 + (-0.044) X_1*Z + (0.008) X_2*Z + 0.114 X_3*Z
\]

Constant (a) means that if profitability, liquidity, and cash flow have a value of zero (0), then the value of the dependent variable (financial distress) is 2.377. The profitability coefficient value for the X1 variable is 0.377. It means that for every increase in profitability in one unit, the level of financial distress will increase by 0.377, assuming that the other independent variables have a fixed value. The value of the Liquidity coefficient for the X2 variable is 0.062. It means that for every increase in liquidity in one unit, the level of financial distress will increase by 0.062, assuming that the other independent variables have a fixed value. The value of the Cash Flow coefficient for the X3 variable is -0.336. It means that for every increase in cash flow in one unit, the level of financial distress will decrease by 0.336, assuming that the other independent variables have a fixed value.
Based on the regression analysis of table 6, the results obtained are:

<table>
<thead>
<tr>
<th>H</th>
<th>Variable</th>
<th>Significance</th>
<th>Taraf</th>
<th>Result</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁</td>
<td>Profitability</td>
<td>0.000</td>
<td>0.05</td>
<td>0.000 &lt; 0.050</td>
<td>Ha Accepted</td>
</tr>
<tr>
<td>H₂</td>
<td>Liquidity</td>
<td>0.728</td>
<td>0.05</td>
<td>0.728 &gt; 0.050</td>
<td>Ha Rejected</td>
</tr>
<tr>
<td>H₃</td>
<td>Cash Flow</td>
<td>0.611</td>
<td>0.05</td>
<td>0.611 &gt; 0.050</td>
<td>Ha Rejected</td>
</tr>
<tr>
<td>H₄</td>
<td>Prof*GCG</td>
<td>0.004</td>
<td>0.05</td>
<td>0.004 &lt; 0.050</td>
<td>Ha Accepted</td>
</tr>
<tr>
<td>H₅</td>
<td>Lik*GCG</td>
<td>0.738</td>
<td>0.05</td>
<td>0.611 &gt; 0.050</td>
<td>Ha Rejected</td>
</tr>
<tr>
<td>H₆</td>
<td>CF*GCG</td>
<td>0.402</td>
<td>0.05</td>
<td>0.611 &gt; 0.050</td>
<td>Ha Rejected</td>
</tr>
</tbody>
</table>

The significance value of profitability is 0.000 (<0.05), which means that profitability has a significant positive effect on the level of financial distress. The significance value of liquidity is 0.728 (>0.050), which means that liquidity has no significant effect on financial distress. The significance value of Cash Flow is 0.611 (>0.05), which means that cash flow has no significant effect on financial distress.

T-table can be seen with the equation df = N – k, where N is the number of objects and k is the number of variables. Then df = 126 – 4 = 122

<table>
<thead>
<tr>
<th>H</th>
<th>Variable</th>
<th>t-count</th>
<th>t-table</th>
<th>Result</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁</td>
<td>Profitability</td>
<td>5.152</td>
<td>1.979</td>
<td>5.152 &gt; 1.979</td>
<td>Ha Accepted</td>
</tr>
<tr>
<td>H₂</td>
<td>Liquidity</td>
<td>0.347</td>
<td>1.979</td>
<td>0.347 &lt; 1.979</td>
<td>Ha Rejected</td>
</tr>
<tr>
<td>H₃</td>
<td>Cash Flow</td>
<td>-0.510</td>
<td>1.979</td>
<td>-0.510 &lt; 1.979</td>
<td>Ha Rejected</td>
</tr>
</tbody>
</table>

The B value for profitability is 0.377, and the Beta value is 0.894, while the B value for profitability after the existence of Corporate Governance is -0.044, and the Beta value is -0.511. It means that Corporate Governance does not strengthen the influence of Profitability on Financial Distress (Z-Score Index). The B value for liquidity is 0.062, and the Beta value is 0.080, while the B value for liquidity after the existence of Corporate Governance is 0.008, and the Beta value is 0.073. It means that Corporate Governance does not strengthen the influence of Liquidity on Financial Distress (Z-Score Index). The B value in Cash Flow is -0.336, and the Beta value is -0.109, while the B value in Cash Flow after Corporate Governance is 0.114, and the Beta value is 0.169. It means that Corporate Governance can strengthen the influence of Cash Flow on Financial Distress (Z-Score Index).

Tabel 7. \( R^2 \) Result

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.569a</td>
<td>0.323</td>
<td>0.289</td>
<td>2.0347</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Cash Flow*Tata Kelola P, Likuiditas, Profitability*CG, Profitability, Cash Flow, Liquidity*CG

Based on the table 7, it is known that the \( R^2 \) value is 0.323. It means that 32.3% of financial distress can be explained by the independent variables used in this study. And the rest is influenced by other factors.

4.6. Discussion

4.6.1. The Effect of Profitability on Financial Distress

Based on the test results, the significance value of the profitability variable (X1) is \( 0.000 < 0.005 \), so Ha is accepted. The t-count value is 5.152 > 1.979 t-table, which means that Ha is accepted. Profitability proxied by Net Profit Margin (NPM) proves that NPM can affect financial distress (Z-Score Index) with a positive coefficient. It means that if the NPM value is higher, then the probability of financial distress (Z-Score Index) proxied by the Altman Z-Score is also higher, which means that if the Altman Z-Sore value is higher, the probability of a company's financial distress will be low. NPM shows how the condition of a company in generating net income in a certain period. The greater the NPM, the higher the level of investor confidence because the company is considered to be in a productive
situation. It is because a high net profit margin increases the company's ability to generate profits to avoid financial distress problems.

The research results support this study by Negoro & Wakan (2021) that profitability has a significant positive effect on financial distress.

4.6.2. The Effect of Liquidity on Financial Distress

Based on the test results, the significance value of the liquidity variable (X2) is 0.729 > 0.005, so Ha is rejected. The t-count value is 0.347 <1.979 t-table, which means that Ha is rejected. Liquidity proxied by the Current Ratio (CR) proves that CR has no significant effect on financial distress (z-score index). The current ratio describes the company's ability to pay short-term obligations or debts due quickly. A current ratio with a number below 1 indicates that there is a possibility that the company will experience difficulties in paying its debts. However, a high current ratio is not necessarily good for the company because it is not using its assets efficiently.

The findings of this study do not support Sepyanto (2019), which found that liquidity significantly reduces financial distress (z-score index). However, Yuniarsih (2020), which found that liquidity, as assessed by the current ratio, had no discernible impact on financial hardship, supports the findings of this study.

4.6.3. The Effect of Cash Flow on Financial Distress

Based on the test results, the significance value of the cash flow variable (X3) is 0.611 > 0.005, so Ha is rejected. The t-count value is -0.510 <1.979 t-table, which means that Ha is rejected. Cash Flow proxied by Operating Cash Flow Ratio or Cash Flow from Operating Activities proves that OCFR has no significant effect on financial distress (z-score index). A low cash flow value does not always mean that the company's financial condition is not good, and conversely, a high cash flow value does not always mean the company's financial situation is good. Based on the results of this study, cash flow cannot be used as a benchmark in determining the company's financial distress, as seen from the z-score index.

The results of this study are supported by the results of research by Purnamawati (2019) that Cash Flow has no significant effect on financial distress.

4.6.4. The Effect of Profitability on Financial Distress with Corporate Governance as a moderating variable

The test results indicate that corporate governance cannot strengthen the influence of profitability on financial distress (z-score index). It means that more or a number of the Board of Commissioners in Corporate Governance does not make supervision more effective, so it cannot strengthen the company's income to avoid financial distress. With the increasing number of the board of commissioners, the board of commissioners does not carry out its duties and functions correctly. In addition, the large number of existing boards of commissioners causes the commissioners' performance to be still not optimal in carrying out the supervisory process on the company's financial statements. Profitability fluctuations cannot be strengthened by the number of commissioners in corporate governance. Usually, profitability will increase depending on the existing market conditions and the company's strategy implemented by the company's marketing. The better the market demand and the method applied, the more profitability will increase to avoid financial distress in the company. The board of commissioners is in charge of supervising and monitoring its financial statements, not the strategies the company's marketing implements to achieve its sales targets.

4.6.5. The Effect of Liquidity on Financial Distress with Good Corporate Governance as a moderating variable

The test results indicate that corporate governance cannot strengthen the influence of liquidity on financial distress (z-score index). The insignificance of the corporate governance variable means that corporate governance cannot contribute to the effect of liquidity on financial distress, either in increasing or decreasing the likelihood of financial distress. A large number of existing commissioners cannot make the company's liquidity increase or decrease. It means that the board of commissioners is still not optimal in carrying out its duties as the board of commissioners in monitoring the company's financial statements.
5. Conclusion

Based on the testing and analysis results above, profitability has a significant positive effect on financial distress (Z-Score Index), so H1 is accepted. Liquidity does not affect financial distress (Z-Score Index), so H2 is rejected. Cash Flow does not affect financial distress (Z-Score Index), so H3 is rejected. Corporate Governance as a moderating variable cannot strengthen the influence of profitability on financial distress (Z-Score Index), so H4 is rejected. Corporate Governance as a moderating variable cannot strengthen the influence of liquidity on financial distress (Z-Score Index), so H5 is rejected. Corporate Governance as a moderating variable cannot strengthen the influence of Cash Flow on financial distress (Z-Score Index), so H6 is rejected.

Based on this research, the management of the company should improve and pay attention to the presentation of financial statements, especially the annual report summary that should be there to make it easier to read the annual report. The management of the company should also pay more attention to the current ratio of the company so that it remains in a good position where the proportion of current assets and current liabilities is maintained. One way to increase the current ratio is to collect the company’s receivables on a large scale and enforce payment cash before delivery or reduce the time for payment of receivables so that companies can avoid financial distress problems.

Based on the results of this study, it is recommended that users of financial statements, both investors and creditors, in assessing the financial distress condition of a company must collect various information about the condition of the company, not only in terms of profitability, liquidity, cash flow or from the financial side but also from the ratio and other aspects based on the necessary considerations to make the right decisions. Using the Altman Z-Score method can also be considered a consideration in making decisions, namely by choosing a company with a stable and high Z-Score value.

References


