

Analysis of Financial Indicators, GCG, and Corporate Bond Ratings on the Prediction of Company Bankruptcy

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Abstract: This study aims to determine the effect of financial indicators, Good Corporate Governance (GCG), and bond ratings on the prediction of company bankruptcy. Independent variables of the financial indicators used are profitability (ROA), liquidity (CR), and leverage (DER), and for Good Corporate Governance used are the size of the board of commissioners, managerial and institutional ownership, and bond ratings. The dependent variable for bankruptcy collapse uses the Zscore developed by Altman. The population in this study are non-financial companies that issue bonds and have been listed on the Indonesia Stock Exchange (IDX) and are rated by PEFINDO in 2018-2020. This study indicates that profitability and liquidity have a significant positive effect on the prediction of company bankruptcy. Leverage and institutional ownership have a significant adverse impact on the prediction of company bankruptcy. On the other hand, the size of the board of commissioners, managerial ownership, and bond rating does not affect the prediction of company bankruptcy.

Keywords: Financial indicators, GCG, Bond rating, ZScore, Bankruptcy

1. Introduction

Bankruptcy is a condition where a company can no longer operate the company properly because the financial difficulties experienced by the entity are already very severe. Elmabrok, et al. (2012) argues that bankruptcy or financial failure occurs when total liabilities exceed the fair value of assets or when current liabilities exceed current assets. Bankruptcy or financial failure experienced by most companies can adversely affect the world economy (June Li, 2012). The bankruptcy of a company usually begins with financial distress, characterized by the uncertainty of profitability in the future. Predictions about the company's financial difficulties related to financial bankruptcy provide guidance for interested parties about whether the company's financial performance will experience problems in the future. Meanwhile, parties outside the company, especially investors, are to assess the current and past financial condition and results of the company's operations and as a guideline regarding the company's performance where the company has the potential to go bankrupt or not (Butet, 2012).

In 2020, due to the COVID-19 pandemic, bond issuance slowed down. The reason is, since the pandemic, investors' risk appetite for bonds has decreased. During the first semester of 2020, rupiah-denominated corporate bonds issued through public offerings amounted to Rp129.29 trillion. This figure is much lower than the same period in 2019, which was Rp54.71 trillion. The amount issued is also lower than the number of matured corporate bonds.

Based on data from Indonesia's securities rating in 2020, the default rate for bonds increased by 2.34 percent compared to 2019, which was only 2.18 percent. This pandemic has had a significant impact on the company's cash flow. Therefore, companies need to predict bankruptcy, one of which is by analyzing financial statements as an early warning to anticipate bankruptcy. One method for predicting bankruptcy is the Altman method. By predicting the bankruptcy, the company is expected to determine the steps that must be taken to improve the declining performance and avoid bankruptcy.

Using quantitative factors (financial) related to financial risk can be seen from the company's financial ratios, such as profitability, leverage, solvency, liquidity, and productivity. Qualitative (non-financial) factors include an analysis of the company's business risks, such as industry competition and the quality of company management. (Brigham, 2019) should also be considered. Christiawan and Tarigan (2007) suggest that managers make a business decision

to maximize company resources. On the other hand, shareholders as the principal cannot supervise all decisions taken and activities carried out by managers as agents. One mistake in decision-making by the agent can result in enormous losses for the company, resulting in financial distress.

According to Bradley et al. (2007), Good Corporate Governance practice can explain differences in corporate bond ratings that are not caught by the company's financial condition. Good Corporate Governance mechanisms can also reduce the risk of default by reducing agency costs, namely by monitoring management performance and reducing information asymmetry between companies and creditors (Jelita, 2014).

Good corporate governance researchers will examine the size of the Board of Commissioners, which plays an important role in the implementation of good corporate governance. The existence of managerial ownership and institutional ownership is part of the assessment aspect in the implementation of Good Corporate Governance (GCG). Managerial ownership is ownership of company shares by managers. Managerial ownership is an important internal monitoring tool for stakeholders and the company's internal management to resolve agency conflicts (Chen and Steiner, 1999). Institutional ownership is part of the company's shares owned by institutional investors, such as insurance companies, financial institutions (banks, financial companies, credit), pension funds, investment banking, and other companies related to this category (Yang et al., 2009). A bond rating is an evaluation by a bond rating agency of qualitative and quantitative information on the creditworthiness of a company or government based on their ability to repay debt and the possible risk of default.

This research is a replication and follow-up research from previous research of Arini and Triyonowati (2013), in the research of Altman Z-Score analysis, to predict the bankruptcy of pharmaceutical companies in Indonesia. The type of research used is descriptive quantitative research. This study indicates that the Altman Z-Score model can detect the possibility of bankruptcy of pharmaceutical companies listed on the Indonesia Stock Exchange. The difference between this study and previous research is that the object of this research is to analyze the effect of GCG and bond ratings, with the object of research being bond issuers listed on the Indonesia Stock Exchange and the year of research. Based on this description, the researcher is interested in researching Financial Indicators, GCG, and Bond Ratings on Predicting Company Bankruptcy: An Empirical Study of Non-Bank Bond Issuers Listed on the Indonesia Stock Exchange 2018-2020 Period.

2. Review of Literature

2.1 Agency theory

Agency theory is a contract between the manager (agent) and the owner (principal). For this contractual relationship to run smoothly, the owner will delegate decision-making authority to the manager. Proper contract planning to align the interests of managers and owners in the event of a conflict of interest is what is at the core of agency theory (Jensen and Meckling, 1976). The agency conflict results in the opportunistic nature of management, which will result in low earnings quality. The low quality of earnings will make decision-making errors to users such as investors and creditors so that the company's value will decrease in the future (Prasetyo, 2010). Good Corporate Governance is a mechanism based on agency theory. The Good Corporate Governance mechanism is expected to be a bridge to increase trust in managers (agents) to manage the wealth of shareholders (principals), and managers (agents) will not commit fraud for their interests.

2.2 Signal Theory

The signal theory is related to the relationship between management and the recipient of information. Signal theory is based on information asymmetry, that is, the imbalance of information acquisition. The information received is not the same because one party has better information than the other party. Therefore, the management needs to provide the required information by the recipients both inside and outside the company. Information is beneficial in providing a record of what the company has done in the past and an overview of its state in the future and its benefits for the company's survival (Jelita, 2014).

2.3 Bankruptcy Prediction

Peter and Yoseph (2011) define bankruptcy as economic distress or means that the company's income cannot cover its costs. Furthermore, the profit is smaller than the cost of capital. It is said to have failed in economic terms if the cash flow generated by the company is less than the expected cash flow. Financial distress means that the company is experiencing financial difficulties (funding in terms of cash or terms of working capital). According to Putri (2015), company bankruptcy starts from the company's financial difficulties where the company in generating profits is too weak or too small, and the company runs a deficit. According to Mengesha et al. (2014), bankruptcy has a reasonably strong relationship to its uncertainty in its ability to continue its operational activities if its financial condition declines.

The existence of an early warning system in bankruptcy or what we know as bankruptcy predictions as an early warning to the company's condition is beneficial for companies experiencing financial distress conditions to improve their performance before bankruptcy occurs.

Altman Z-score prediction model. The formula for research on bankruptcy is called the Altman Z-score. The formula is:

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1X_5$$

Information:

Z = Overall index

X₁ = working capital/total assets X₂ = retained earnings/total assets

X₃ = EBIT/total assets

X₄ = market value equity/book value of total liabilities

X₅ = sales/total assets

With the following conditions:

If $Z > 2.99$ = "safe" zone

If $1.81 < Z < 2.99$ = "grey" zone

If $Z < 1.81$ = "distress" zone

2.4 Profitability Ratio

According to Kasmir (2016), Return On Assets is a ratio that shows the results of the total assets used in the company. According to Fahmi (2012: 98), Return On Assets sees the extent to which investments that have been invested can provide a return of profits as expected, and investment is the same as the company's assets that are invested or placed. The formula for calculating return on assets (ROA): Net Profit/Total Asset x 100%.

2.5 Liquidity Ratio

The current ratio is a general measure of a company's ability to meet debt needs when it matures (Fahmi, 2014). While according to Hanafi and Halim (2016), current ratio is a measure of a company's ability to meet its short-term debt using current assets (assets that will turn into cash within one year or one business cycle). Current Ratio is the ratio between the total current assets and current liabilities." The formula for calculating the current ratio is $CR = \text{Current Asset} / \text{Current Liabilities} \times 100\%$.

2.6 Liquidity Ratio

This ratio compares the amount of debt with the value of equity. The value of equity and the amount of debt used for the company's operational activities must be in a reasonably proportional amount. The formula used: $DER = \text{total debt} / \text{Equity} \times 100\%$.

2.7 Size of the Board of Commissioners

According to KNKG (2006), the Board of Commissioners is the highest internal control mechanism responsible for supervising and providing advice to the Board of Directors and ensuring that the company implements GCG. The Board of Commissioners is the essence of Corporate Governance, ensuring the implementation of corporate strategy, supervising management in managing the company, and requiring accountability. Size of the board of commissioners = number of commissioners.

2.8 Managerial Ownership

The existence of share ownership by the managerial side will result in the management carrying out company activities as much as possible because the management will directly feel the impact on their decisions. Managerial ownership = number of shares owned by managerial/outstanding shares.

2.9 Institutional Ownership

Institutional ownership is the percentage of shares owned by institutional investors, such as investment companies, banks, insurance companies, and institutional ownership and other companies (Jelita, 2014). Institutional ownership or institutional ownership has the ability to control the management through an effective and precise monitoring process to reduce earnings management actions (Utami, 2012). Institutional ownership = number of shares owned by managerial/outstanding shares.

2.10 Bond Rating

Bond ratings reflect a company's ability to repay its investors. The smaller the risk of default, the higher the rating given.

3. Data and Methodology

3.1 Data

This research collected data from non-financial companies that issue bonds listed in the Indonesia Stock Exchange (IDX) and are rated by PEFINDO in 2018-2020. The method used in this research is a descriptive quantitative to find data on the effect of financial indicators, Good Corporate Governance, and bond ratings on bankruptcy prediction. The data source used is secondary data obtained from the issuer's website. Sources of secondary data used were official documents, books, results of previous research, and other data related to research.

3.2 Methodology

The design of this research is causal research. The research was conducted to determine the effect of the independent variable (independent variable) on the dependent variable (dependent variable). According to Sugiyono (2017), causal research aims to determine causal relationships. This study was conducted to see the effect of Financial Indicators, GCG, and bond ratings as independent variables and bankruptcy prediction as the dependent variable.

4. Finding and Analysis

4.1 Profitability Significantly Affect the Prediction of Company Bankruptcy.

The multiple linear regression analysis results show that profitability positively and significantly affects the prediction of corporate bankruptcy. Therefore, the higher the company's profitability, the higher the resulting Z score, which means the healthier the company, is. Z score above 2.99 means a safe zone. The results of this study are in line with the theory, which states that the profitability ratio is one of the ratios used to measure the company's ability with the overall funds used for the company's operations to generate profits. Companies that create profits can undoubtedly maintain their operations better so that the condition of the company is in the safe

category and is not in a state of bankruptcy.

4.2 Liquidity Significantly Affect the Prediction of Company Bankruptcy.

The multiple linear regression analysis results show that liquidity positively and significantly affects predicting corporate bankruptcy. Therefore, the higher the company's liquidity, the higher the Z score, meaning the healthier the company. Zscore above 2.99 is in the safe zone. This study shows that PT Mayora Tbk has the highest current ratio of 10.4%, with a Z score of 4.13. Although it is not the highest Zscore value, it is influenced by the liquidity coefficient of 0.273, lower than the profitability coefficient. The results of this study are in line with the theory that a liquidity ratio is a form of measuring a company's security. This constellation is used to measure the company's ability with the overall funds used for the company's operations to generate profits. Many current assets are available to cover short-term obligations that are soon due.

4.3 Leverage Significantly Affect the Prediction of Company Bankruptcy.

The multiple linear regression analysis results show that leverage has a negative and significant effect on the prediction of corporate bankruptcy. This means that the higher the leverage value of the company, the lower the resulting Z score, which means that the prediction of bankruptcy is prone to occur in the company. Where the Altman Zscore score below 1.81 is in the dangerous zone. This study shows that PT Modern land Tbk has the highest DER value of 7.55%, with a Z score of 1.04. With a leverage coefficient value of 0.272. The results of this study are in line with the leverage ratio theory that compares the amount of debt with the value of equity. The increase in the company's debt compared to its equity can lead to the potential for bankruptcy for the company. However, as long as the value of equity and the amount of debt used for the company's operational activities are still in a proportionate enough ratio, the company's condition is still in a safe condition.

4.4 Size of the Board of Commissioners does not Affect Significantly the Prediction of Company Bankruptcy.

The results of multiple linear regression analysis show that the size of the board of commissioners does not affect the prediction of corporate bankruptcy. This means that the smaller or higher size of the company's board of commissioners does not affect the high and low Z scores. The large or small number of commissioners in the company cannot affect the possibility of company bankruptcy because a large number of commissioners does not necessarily lead to efficiency and profit for the company, vice versa. It can also be said that the number has not been able to show performance.

4.5 Managerial Ownership does not Affect Significantly the Prediction of Company Bankruptcy.

The results show that managerial ownership does not affect the prediction of corporate bankruptcy. This means that the smaller or higher managerial ownership upon the company's shares does not affect the high or low Z score. This study shows that many companies do not have managerial ownership at all, such as PT Surya Semesta Internusa Tbk, PT Timah (Persero) Tbk, PT Modern land Realty Tbk, PT Fast Food Indonesia Tbk, PT Adhi Karya (Persero) Tbk, PT Telkom Indonesia (Persero) Tbk, PT Indosat Tbk, and PT Jasa Marga. Still, these companies have very diverse Z scores, ranging from safe zones to dangerous zones. It can be said that managerial ownership is not directly related to the prediction of company bankruptcy.

4.6 Institutional Ownership Significantly Affect the Prediction of Company Bankruptcy.

The results show that institutional ownership has a negative and significant effect on the prediction of corporate bankruptcy. This means that the higher the value of institutional ownership, the lower the resulting Z score, which means that the company's prediction of bankruptcy is prone to occur. The results of this study are not in line with the theory that management can control institutional ownership through an effective and appropriate monitoring process to reduce earnings management actions (Utami, 2012). Institutional ownership has an important role because institutional ownership can control earnings management actions. In addition, institutional investors can predict future earnings more easily with the available information (Sari and Murtini, 2015).

4.7 Bond Rating does not Affect Significantly the Prediction of Company Bankruptcy.

The multiple linear regression analysis results show that bond ratings do not affect the prediction of corporate bankruptcy. This means that the lower or higher the bond rating value does not affect the high or low Z score. Bond-rating is an assessment given by a rating agency on the risks inherent in the financial instrument. While the prediction of bankruptcy is assessed on the company, not on the financial instruments issued by the company. Therefore, the bond rating cannot directly predict the company's bankruptcy.

5. Conclusion

- a. Profitability has a significant positive effect on the prediction of corporate bankruptcy. It could be concluded that the higher the profitability, the higher the Z-Score value, which means the company is in the safe zone and can avoid company bankruptcy.
- b. Liquidity has a significant positive effect on the prediction of corporate bankruptcy. It could be concluded that the higher the liquidity, the higher the Z-Score value, which means the company is in the safe zone and can avoid company bankruptcy.
- c. Leverage has a significant adverse effect on the prediction of company bankruptcy. This shows that the higher the leverage, the lower the Zscore value, which means the company is vulnerable to predictions of corporate bankruptcy.
- d. The size of the board of commissioners does not affect the prediction of the company's bankruptcy.
- e. Managerial ownership does not affect the prediction of company bankruptcy.
- f. Institutional ownership has a significant adverse effect on the prediction of corporate bankruptcy. This shows that the higher the proportion of institutional ownership, the lower the Zscore value. This means the company is increasingly vulnerable to predictions of corporate bankruptcy
- g. Bond ratings do not affect the prediction of the company's bankruptcy.

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