Does Corporate Governance Have An Effect On Financial Distress?: Altman Z-Score Approach

Fransiska Dwi Ratna Puspitasari¹, Dhaniel Syam², Dwi Irawan³*
¹,²,³Accounting Study Program, Faculty of Economics and Business, University of Muhammadiyah Malang, Indonesia

ABSTRACT

Purpose: This study aims to test and obtain empirical evidence that projected Corporate Governance with managerial ownership, independent commissioners, board of directors, and audit committees affects financial distress.

Methodology/approach: The object of this study is all mining sector companies listed on the Indonesia Stock Exchange in 2019-2021. The sample determination technique in this study used the Purposive Sampling method with a total sample of 35 companies. The data analysis technique in this study used the panel data regression testing method with the STATA statistical tool version 15.

Findings: The results of the study partially showed that independent commissioners negatively affect financial distress in mining companies. Then for the variables of managerial ownership, board of directors and audit committees have no effect on financial distress. The results of the study simultaneously showed that together the variables of managerial ownership, independent commissioners, board of directors and audit committees had a significant effect on financial distress.

Practical implications: These research findings have an impact on stakeholders and policy makers considering business continuity.

Originality/value: This research has the latest in the form of modifications to models and objects that are relevant to the Financial Distress.

Keywords: Audit Committees; Board Of Directors; Financial Distress; Independent Commissioners; Managerial Ownership.
INTRODUCTION
Continuous economic changes result in companies having to adapt to new conditions. Often changes have a negative impact on the company. One of the sectors affected by economic changes is the mining sector. In 2020, this sector experienced a significant impact due to the Covid-19 outbreak which resulted in changes to economic conditions. The impact arising from these economic changes is a decrease in prices for mining commodities and also share prices (Garinas, 2020). Based on financial report data in the third quarter of 2020, it can be seen that 10 national coal issuers on the Indonesia Stock Exchange (BEI) experienced a decline in sales and operating income with an average decline of up to 26% (Rizal et al., 2022). The 10 coal issuers are PT Adaro Energy Tbk (ADRO), PT Indika Energy Tbk (INDY), PT Bumi Resources Tbk (BUMI), PT Bukit Asam Tbk (PTBA), PT Indo Tambangraya Megah Tbk (ITMG), PT Delta Dunia Makmur Tbk (DOID), PT Harum Energy Tbk (HRUM), PT Borneo Olah Sarana Sukses Tbk (BOSS), PT Petrosea Tbk (PTRO) and PT Mitrabara Adiperdana Tbk (MBAP).

With this problem, if action is not taken immediately it could have an impact on declining financial conditions and will result in the possibility of financial distress (Sutra & Mais, 2019). According to Rahmawati and Khoiruddin (2017), financial distress is defined as a stage in which a company faces a decline in financial conditions that is occurring before a bankruptcy occurs. Financial conditions in financial distress can be reviewed through financial reports, namely by comparing the amount of assets with liabilities, where assets are less than the amount of debt they have.

With so many cases of companies having the potential to experience financial distress, it is necessary to take precautions to minimize the possibility of such problems. According to Helena and Saifi (2018) and Sasanti and Hudaya (2022), one way that can reduce the possibility of financial distress is by implementing corporate governance. Based on agency theory, it is explained that in a company there are differences in interests which one party wants, which is often referred to as (agency problem). Therefore, it is necessary to have a good company structure so that it can minimize agency problems in a company.

Furthermore, International Financial Corporate defines Corporate Governance as a structure and process by which the company will be directed or controlled. Meanwhile, the Organization for Economic Co-operation and Development (OECD) defines corporate governance as governance within a company that involves a series of relationships between management, board of shareholders and other stakeholders. Where in this case the company management is projected with directors, an independent board of commissioners and an audit committee. Meanwhile, company ownership is projected by managerial ownership. The existence of Corporate Governance will have an impact on creating good relationships between stakeholders in the company.

If we refer to previous research, it can be seen that there are inconsistencies in several existing studies. Where the first variable in measuring share ownership in GCG in Hariyani and Kartika (2021) research explains that managerial ownership has no effect on financial distress. Meanwhile, other
research conducted by Yuliani and Rahmatiasari (2021) shows that managerial ownership has a positive effect on financial distress.

The second variable in measurement is the independent board of commissioners. According to research on independent boards of commissioners conducted by Pramudena (2017) which explains that independent boards of commissioners have a positive influence on the company's financial performance. This research contradicts research conducted by Suryanto and Refianto (2019) which states that an independent board of commissioners has no influence on financial distress in a company.

Next, the third variable in measurement is the board of directors. Based on research conducted by Ibrahim (2019), the results show that the board of directors has an influence on financial distress. However, these results are different from the results of research conducted Rahmawati and Khoiruddin (2017). Where the research that has been carried out shows that the board of directors has a negative effect on financial distress.

The last variable in measurement is the audit committee. According to Haryani and Kartika (2021), the audit committee has a positive influence on financial distress, but research conducted by Suryanto and Refianto (2019) shows that the audit committee does not have a significant influence on financial distress.

This research focuses on the mining sub-sector. This sector was chosen because based on data released by the Ministry of Energy and Mineral Resources, mining commodities are still a mainstay as a source of income for Indonesia. Apart from that, based on data released by IDX, the mining sector is the stock sector that is most popular among people to invest in the capital market (Nurhaliza, 2022). Therefore, this research focuses on this sector which is the sector most transacted by the public.

The difference between this research and previous research lies in the object and research period. Based on the background that has been described, the author is interested in conducting research to test the influence of Corporate Governance on predictions of bankruptcy in the mining sector of publicly traded companies that have been listed on the Indonesia Stock Exchange in 2019-2021.

LITERATURE REVIEW

Managerial ownership in the ownership structure is whether or not shares are owned by management as company agents. This ownership has an impact on the company's intellectual capital which will have an impact on creating competitive advantage value which will increase value and will have an impact on investor confidence which is closely related to the company's capital. Apart from that, having share ownership by the agent will be able to align the interests of the agent and the principal. Therefore, the existence of share ownership by managerial parties will have an impact on the better implementation of corporate governance in companies because managers can act as agents as well as owners of the company. Furthermore, based on research conducted by (Maryam & Yuyetta, 2019), it is stated that the amount of share ownership by management is considered to be in line with the level of similarity of interests that exist between management as agent and
management as shareholder as principal, which will reduce the possibility of financial distress problems occurring.

Therefore, the researcher suspects that there is an influence of managerial ownership on financial distress, and based on this, the researcher makes the following hypothesis:

**H1: Managerial ownership influences financial distress.**

In a company, the independent board of commissioners has an important influence and is responsible for supervising and providing control over decisions to the board of directors so that later the implementation of corporate governance can really be carried out well in the company (Kyere & Ausloos, 2021). In a company, an independent board of commissioners functions as a management oversight mechanism by monitoring performance through operational activities and policies adopted by the board of directors. An independent board of commissioners will carry out its duties effectively if there is support from independent board members who have no relationship with the owner or manager of the company (Palupi, 2022). Based on the arguments above, the following hypothesis can be formulated:

**H2: The Board of Commissioners influences financial distress.**

The board of directors is part of the internal company that has the task and responsibility for leading the company's operational activities. With its responsibilities and duties, it can be interpreted that the board of directors in a company will determine the direction of the company by determining what policies to take or what strategies can be applied to the company, both short and long term. Based on previous research, it is stated that the size of the board structure in a company is also important, where a good board size can ensure that a company runs according to responsibility, according to the needs of the organization's goals (Buallay et al., 2017). Then, the existence of a board of directors in a company will contribute to the value of the company through evaluations, decisions, information issued so that it is hoped that it will be able to provide direction for management in running the company so that it can minimize mistakes that will impact financial difficulties (Amaliyah & Herwiyanti, 2019).

So the formulation of the relationship between the board of directors and financial distress is described in the following hypothesis:

**H3: The Board of Directors influences financial distress.**

According to the Decree of the Chairman of the Capital Market and Financial Supervisory Agency KEP-643/BL/2012, it is explained that the audit committee is a committee formed by the head of the board of commissioners and must be responsible for assisting the duties and functions of the board of commissioners. An issuer or public company must have an audit committee consisting of 3 members from an independent board of commissioners and parties from outside the issuer or public company who have an understanding of accounting and finance. With the supervision carried out by the audit committee, it encourages company management to manage its business in a healthy manner. Then, previous research stated that the more audit committees there are in a company, the more control can be exercised over that company (Irma, 2019; Widyati, 2013).
So the formulation of the relationship between the audit committee and financial distress is described in the following hypothesis:

H4: The Audit Committee has an influence on financial distress.

![Figure 1. Research Framework](image)

**METHOD**

This research is classified as associative research, namely research that aims to study the relationship of one variable with other variables. Where in this case, research was carried out on relationships (correlation) and causal relationships (causality). In this research there are five variables, namely managerial ownership, independent board of commissioners, directors and audit committee. The data used is secondary data. The secondary data source for this research is a type of secondary data source obtained from the publication of financial reports and annual reports of mining sector companies listed on the Indonesia Stock Exchange (BEI) for 2019-2021. The population used is all publicly traded companies in the mining sector listed on the Indonesia Stock Exchange (BEI) using purposive sampling in taking samples. The data acquisition technique in this research uses the documentation method. Documentation, the data used in this research is carried out by documenting the data that has been obtained. The data sources referred to in this research are financial reports and annual reports, most of which are taken through the official website of the Indonesian Stock Exchange and the websites of each issuer.

In the operational variables of scientific research, there are several elements that form the basis for implementation. In this research, two types of variables are used, namely the dependent variable symbolized by (Y) and the second, namely the independent variable symbolized by (X).
**Independent variables**

Managerial ownership is measured using dummy variables. Where a value of 1 is given if there is managerial share ownership and 0 otherwise. Apart from that, measuring managerial ownership using dummy variables was also carried out by Latifah et al. (2019) with the same criteria. An independent board of commissioners of 30% is not high enough for an independent board of commissioners to determine the policies taken by the board of commissioners. So in this study a dummy variable is used with the condition that if the number of board of commissioners is > 30% then it has a value of 1 and a value of 0 is given for the opposite condition.

Board of directors is measured using the dummy variable used by Buallay et al. (2017), which has a value of 1 if there are 8-12 members on the board of directors and for other criteria it is given a value of 0. The audit committee is measured using a dummy variable with the criteria used in research conducted by Nadirsyah & Muharram, 2015, namely a value of 1 is given to companies that have > 3 audit committee members and 0 is given to companies that have an audit committee < or equal to 3.

**Dependent Variable**

The measurement model uses the Altman-Z score method to measure the dependent variable. The Altman Z-score model in question is:

\[ Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 0.999X_5 \]

Information:

- \( Z \) = Brankrupy Index.
- \( X_1 \) = Working capital/ total asset.
- \( X_2 \) = Retained earning/ total asset.
- \( X_3 \) = EBIT/ total asset.
- \( X_4 \) = Market Value of Equity/ book value of total liabilities.
- \( X_5 \) = Sales/ total asset

**Data analysis technique**

In testing the research hypothesis, panel data regression analysis techniques were used. Panel data regression analysis is a combination of time series with cross section data. The analytical tool used in this research is using STATA for each research test, with stages consisting of descriptive statistics, determining the panel data regression model using the Chow test and Hausman test, then determining the hypothesis using the selected model between the Common Effect Model and Fixed Effect Model, and effect models.

**RESULTS & DISCUSSION**

**Descriptive Analysis**

Based on table 1, the results of descriptive statistical tests obtained 108 observation data obtained from 36 mining companies for a period of 3 years, namely 2019-2021. Managerial ownership is measured using a dummy where the results used are 1 and 0. 1 for companies whose share ownership is partially owned by the company manager and 0 for companies whose shares
are not owned by the managerial party. The results of this test have an average of 0.6759259 and a standard deviation of 0.4702098. The independent board of commissioners is measured using a dummy where the results used are 1 and 0. 1 for companies that have an independent board of commissioners > 30% of the total board of commissioners in the company and 0 for companies that have a board of independent commissioners < 30% of the number of board of commissioners in the company. This variable has an average of 0.888889 with a standard deviation value of 0.3157348.

Table 1 Statistik Deskriptif

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Obs.</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y FD</td>
<td>108</td>
<td>6.167623</td>
<td>7.048907</td>
<td>-3988086</td>
<td>33.85999</td>
</tr>
<tr>
<td>X1 KM</td>
<td>108</td>
<td>0.6759259</td>
<td>0.4702098</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>X2 DKI</td>
<td>108</td>
<td>0.888889</td>
<td>0.3157348</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>X3 D</td>
<td>108</td>
<td>0.0925926</td>
<td>0.2991212</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>X4 KA</td>
<td>108</td>
<td>0.1388889</td>
<td>0.3474428</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Results of data processing STATA

The board of directors is measured using a dummy where the results used are 1 and 0. 1 is for companies that have a board of directors totaling 8-12 members and for other criteria the value is given 0. For this variable, the average value is known to be 0.0925926 with a value The standard deviation is 0.2991212. The audit committee is measured using a dummy with the values used, namely 1 and 0. 1 is given to companies that have > 3 audit committee members and 0 is given to companies that have an audit committee < or equal to 3. Based on the descriptive statistical tests that have been carried out it is obtained The average result is 0.1388889 with a standard deviation value of 0.3474428. The dependent variable is financial distress which is measured using the Altman Z-score approach. With the descriptive results of the Financial distress variable, the lowest result was -3.988086 at PT. Exploitasi Energi Indonesia Tbk, the highest result of 33.85999 was at PT. Mitrabhahtera Segara Sejati Tbk, with the average value of the entire sample being 6.167623 with a standard deviation of 7.048907.

Data Analysis via Panel Data Regression

It can be seen from the test results that have been carried out for the chow test in the presentation of table 2 with the financial distress approach that the chi-square probability value is 0.0000 so it can be interpreted that <0.05 then H1 is accepted and this means that the best model is the fixed effect model so it must be continued with the test hausman.

Table 2 Chow Test Results

<table>
<thead>
<tr>
<th>Effect Test</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-Section Chi-Square</td>
<td>0.0000</td>
</tr>
</tbody>
</table>
Based on the results of the data produced in table 3 by looking at the Random Cross-Section, the resulting probability is 0.0653, which means that the probability is greater than the significance level of 5% so that H1 is rejected and the best model that can be used in this research is Random Effect Model so it does not require classic assumption tests.

**Table 3 Hausman Test Results**

<table>
<thead>
<tr>
<th>Effect Test</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-Section Chi-Square</td>
<td>0.0653</td>
</tr>
</tbody>
</table>

Based on the data in table 4, it is stated that the value of the coefficient of determination or Adj. The R-Square with the Financial Distress approach is 0.0423 so it can be interpreted that there is a correlation between the independent and dependent variables. With the value Adj. R-Square of 0.0423 means that all independent variables used in this research are able to explain the dependent variable of 0.0423 or 4.2%.

**F Test (Simultaneous Significance Model)**

Based on the data that has been presented, it is known that the F-Statistic probability value using the Financial Distress approach is 0.0084, which means that the value of the F-Statistic probability is accepted at a significance level of 0.05%. So it can be concluded that H1 is accepted. By accepting H1, it can be interpreted that managerial ownership, independent board of commissioners, board of directors, and audit committee together (simultaneously) influence the condition of Financial Distress in the company.

**Partial Significance Test (t-Test)**

Based on table 4, it can be seen that the t-statistic probability value for the managerial ownership variable using the Financial Distress approach obtained a result of 0.597 > 0.05 with a coefficient of 0.93701 which can be interpreted as meaning that this independent variable has no effect and is not significant on the company's financial distress. Therefore, it can be concluded that H1 is rejected.

Tests on the independent board of commissioners variable obtained results of 0.003<0.05 with a coefficient of -6.628234, which means that there is a negative influence between the independent board of commissioners on the company's financial distress. If you look at the coefficient value, it shows a negative value. Therefore, it can be concluded that H2 is accepted. The board of directors variable obtained a result of 0.484 with a coefficient of 1.645976 > 0.05, which means that this independent variable has no effect on the company’s financial distress. Therefore, it can be concluded that H3 is rejected. The audit committee variable obtained a result of 0.101 > 0.05 with a coefficient of -3.312288, which means that this independent variable has no effect on the company's financial distress. Therefore, it can be concluded that H4 is rejected.
Managerial Ownership on Financial Distress

Based on the tests that have been carried out, in this study the t-statistical probability value for the managerial ownership variable using the Financial Distress approach obtained a result of 0.597 with a coefficient of 0.93701. With a probability of 0.597, it shows that this figure is greater than the significance level of 0.05 or 5%, which means that this independent variable has no effect on the company’s financial distress.

The results of this research are not in line with existing theories on corporate governance, where the theory explains that managerial ownership of a company can reduce agency problems as a result of differences between the two parties, namely principal and agency. In this theory, it is explained that having shares owned by managerial parties as agents of the company can improve the financial performance of the company so that it can reduce the possibility of financial distress. This happens because according to this theory, ownership will align the interests of managerial and shareholder interests so that managerial feels a direct impact from decisions taken previously.

However, in practice, share ownership by managerial parties has no effect on the activities carried out by management in managing the company’s business (Hariyani & Kartika, 2021). According to Rahmawati and Khoiruddin (2017), share ownership by managers is only used as a symbol to attract investors’ interest in investing in their company. This happens because investors assume that the value of the company will continue to increase because the management has invested in the company.

Independent Board of Commissioners on Financial Distress

In this research, the t-statistical probability value of the independent board of commissioners variable using the Financial Distress approach obtained a result of 0.003, where this value was accepted with a significance level of 0.05. Then with a coefficient of -6.628234, it can be interpreted that there is a negative influence between the independent board of commissioners on the company's financial distress.

These results reflect the significant influence between the independent board of commissioners variable and financial distress. The influence that occurs is a negative influence, which can be interpreted as the increasing number of independent commissioners in the company resulting in a decrease in the possibility of Financial Distress in the company.

This third measurement variable is in accordance with the theory explained in the corporate governance mechanism. In theory, it is explained that the independent board of commissioners has an important influence and is responsible for supervising and providing control over decisions to the board of directors so that later the implementation of corporate governance can really be carried out well in the company. With the duty of the independent board of commissioners as the party in charge of providing control over decisions taken by the board of directors, this will have an impact on reducing fraud in company management. Apart from that, with an independent board of commissioners, company management can be carried out professionally without being influenced by anyone. This research is in line with research
Board of Directors on Financial Distress

In this research, the t-statistical probability value for the board of directors variable using the Financial Distress approach obtained a result of 0.484 with a coefficient of 1.645976, which can be interpreted as meaning that the independent variable has no effect on the company's financial distress. The insignificant influence on this variable illustrates that the size of the board of directors in a company does not necessarily influence the level of significance in the company's Financial Distress situation. So this research is not in line with agency theory. Where in this theory it is explained that directors as agents are part of the internal company who have the task and responsibility for leading the company's operational activities in order to optimize profits from the owner (principal) by obtaining rewards and compensation according to the contract.

This research is not in line with existing mechanisms in corporate governance. In this mechanism, it is explained that the board of directors is part of the internal company which has the task and responsibility for leading the company's operational activities. Where later the board of directors will be tasked with making decisions by dividing tasks according to their capabilities.

However, in its application in determining company policy, the board of directors has limitations in its activities. This is due to regulations made by the government. This regulation, namely Law No. 40 of 2007 article 92 paragraph (4) concerning Limited Liability Companies, states that the General Meeting of Shareholders (GMS) determines the division of duties and management authority between two or more members of the board of directors, so that in this case there are still limitations. authority exercised by the board of directors. As is known, the board of directors is the party who knows best about the actual condition of the company, however, in practice, every decision in a company going public is still based on the General Meeting of Shareholders (GMS) (Sasanti & Hudaya, 2022). So the results of this research are in line with research conducted by Ananto et al. (2017) which states that the board of directors has no effect on Financial Distress. This is the reason why no matter how large or small the number of directors in a company is, it does not affect the company's financial distress condition.

Audit Committee on Financial Distress

In this research, the t-statistical probability value of the audit committee variable using the Financial Distress approach obtained a result of 0.101 with a coefficient of -3.312288, which means that the independent variable has no effect on the company's financial distress. The insignificant influence on this variable illustrates that the size of the number of audit committees in a company does not necessarily influence the level of significance in the company's Financial Distress situation. So this research is not in line with agency theory.

In corporate governance, it is explained that the supervision carried out by the audit committee creates encouragement for company management to manage its business in a healthy way. In other words, the audit committee can be said to be the party that bridges the relationship between company management,
the board of commissioners and the findings obtained during supervision of management to develop the business. So, in this case the audit committee plays a role as a driver of Good Corporate Governance by implementing the principles of transparency, accountability, responsibility and fairness.

The results of this research are in line with research conducted by Harahap et al. (2022) which explains that the reason the audit committee has no effect on financial distress is because the existence of an audit committee in a company is only used to fulfill regulations so that the existence of an audit committee is only an aspect of formality to fulfill the regulations of the regulator. The regulation referred to in this case is Bapepam Decree Number 29 of 2004 which must be complied with by companies going public. Then, according to Helena and Saifi (2018), the increasing number of members the audit committee has will sometimes result in difficulties in reaching an agreed decision in carrying out a performance.

CONCLUSION

The conclusion from this research is that managerial share ownership has no effect on financial distress, the independent board of commissioners has a significant and negative effect on financial distress, the board of directors in this study has no effect on financial distress, the audit committee has no effect on financial distress.

The limitation of this research is that this research only focuses on mining sector companies, where perhaps the mining sector and other sectors have differences due to the influence of existing economic conditions. Therefore, this research cannot describe other industrial sectors on the IDX. Then this research only focuses on measuring financial distress using internal factors that exist in the company where it is known that there are external factors that can also influence the existence of financial distress.

The suggestion from the author regarding the research that has been carried out so that it can be used as an evaluation for further research is that it is hoped that further research can expand the research object by adding other industrial sectors. It is hoped that further research can add other variables that can describe external factors in predicting financial distress seen from a macro view. economics such as inflation rates and government policies.

REFERENCES


Does Corporate Governance ...


**How to Cite:**