Determinate of Financial Distress

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ABSTRACT
This study aims to examine the effect of financial performance and corporate governance mechanisms on financial distress. The financial performance used in this study was liquidity, leverage, activity, and profitability, while the corporate governance mechanism used the Board of Directors and Audit Committee. The subjects used in this study were Manufacturing Companies listed on the Indonesia Stock Exchange and Malaysia Stock Exchange for the period 2017 - 2018. The sampling technique employed purposive sampling. The number of manufacturing companies sampled was 61 companies from a total of 260 on the IDX and 62 companies from 236 companies on the KLSE. The analysis method utilized multiple linear regression using the SPSS 16 program. This study’s results indicated that liquidity, activity, and probability negatively affected both Indonesia’s and Malaysia’s financial distress. Meanwhile, the other variables: leverage, the Board of Directors, and the Audit Committee did not influence financial distress both in Indonesia and Malaysia. Also, there were differences in the financial distress level in Indonesia and Malaysia. Besides, there were differences in the impact of liquidity, leverage, activity, profitability, the Board of Directors, and the Audit Committee on financial distress in Indonesia and Malaysia.

Keywords: Liquidity, Leverage, Activity, Profitability, The Board of Directors, Audit Committee.

1. INTRODUCTION
A company established must have a purpose. Most companies are founded with almost the same goal: to generate a profit, where the company will use the profit to maintain its viability. To be able to maintain its business’s viability, company management must be able to manage the company's financial performance properly. Often, changes in economic conditions can affect a company's financial performance from large to small. Lack of good analysis and decisions regarding whether a company is experiencing financial problems or not causes a greater chance for the company to experience a decline in financial performance. It is where the management is required to be able to properly manage its financial performance to reduce the company’s possibility of experiencing a decline in financial performance, which causes bankruptcy. Bankruptcy faced by a company will cause losses for employees, shareholders, and the national economy [1]. Bankruptcy is the most unwanted financial distress [2].

At the time of the global crisis in 2008, the manufacturing industry was an industry that was severely affected by the global crisis. The export share was the worst part of the manufacturing industry’s trade due to low demand from other countries, high prices for raw materials, and difficulty in borrowing from banks. The Indonesian capital market experienced a decline in share prices ranging from 45 to 60 percent from the initial position in 2008.

It was due to the economic crisis and foreign investors who needed liquidity to sell shares. Since the 2008 global crisis, as many as eight companies were eliminated from the IDX [3]. This phenomenon affected the company’s performance and could cause the company to experience financial difficulties because Indonesia was very dependent on investor funds.

2. LITERATURE REVIEW

Agency Theory
Agency theory describes the contractual relationship between the manager as an agent and the investor or company’s owner as the principal. This agency relationship occurs when the principal delegates authority and duties to the agent to provide services in accordance with management objectives.
Agency theory also reveals that the principal and the agent have different interests. Therefore, according to, based on agency theory, there is a conflict of interest involving the principal and the agent in a business process. In this case, the one who often experiences losses is usually the principal because the agent, who wants high profits, will do things that can harm various parties; for example, the agent will falsify financial statements, spend extravagantly, and even increases their salaries. Thus, to reduce these problems, it requires supervision, such as GCG implementation in the company.

**Corporate Governance**

Corporate governance is one of the key elements in increasing economic efficiency, covering a series of relationships between company management, the board of directors, shareholders, and other stakeholders [4]. According to the National Committee on Governance Policy, good corporate governance principles are Transparency, Accountability, Responsibility, and Independence [5].

**Liquidity and Financial Distress**

According to Kasmir in Andre and Taqwa, one cause of financial distress is when companies experience difficulty fulfilling short-term obligations [6], [7]. If the company can pay its short-term obligations well, it is unlikely that it will experience financial distress. Conversely, if the company cannot pay its short-term obligations, its potential to experience financial distress is even higher.

Widhiari and Merkusiwiati stated that the liquidity ratio affected financial distress. This opinion is also in line with research conducted by Hidayat and Meiranto and Cinantya and Merkusiwiati that liquidity influenced financial distress [8], [9]. On the other hand, Putri and Merkusiwiati affirmed that liquidity did not affect financial distress [2]. It is also supported by a study carried out by Mafiroh and Triyono [10]. Based on previous research and these several theories, the following hypotheses were derived:

- **H_1L**: Liquidity negatively affects company financial distress in Indonesia.
- **H_1M**: Liquidity negatively affects company financial distress in Malaysia.

**Leverage and Financial Distress**

According to Kasmir, in Andre and Taqwa, leverage is a ratio used to measure a company's ability to pay its obligations, both short and long term, if liquidated [6], [8]. Financing with debt incurs a fixed burden. Thus, a company whose assets are financed by high debt means that the greater the assets financed by debt, the greater the liabilities and interest that the company will pay. If the company cannot pay its obligations, it will likely experience financial difficulties (Financial Distress).

Damayanti, Yuniarta, and Sinarwati found that the leverage ratio affected financial distress [11]. This study’s results are also consistent with the study conducted by Hanifah and Purwanto [12]. However, Cinantya and Merkusiwiati [9] revealed that leverage did not affect financial distress. It is in line with Widhiari and Merkusiwiati, who elucidated that leverage did not influence financial distress. Based on previous research and these several theories, the following hypotheses were derived:

- **H_2L**: Leverage positively affects company financial distress in Indonesia.
- **H_2M**: Leverage positively affects company financial distress in Malaysia.

**Activity and Financial Distress**

Activity is the ratio employed to assess the company's ability to manage its assets in the company’s operations. Using company assets for operating activities will increase the amount of the company's production, thereby increasing sales and profits owned by the company. If the company's assets cannot be maximized in its use, then the company's revenue cannot be maximized, and as a result, the company will likely experience more significant financial distress. Financial distress can be predicted using financial ratios.

According to Hidayat and Meiranto, the activity ratio impacted financial distress [8]. It is also reinforced by Hanifah and Purwanto, who uncovered that activities influenced financial distress [12]. Based on previous research and some of these theories, the hypotheses were derived:

- **H_3L**: Activities negatively affect company financial distress in Indonesia.
- **H_3M**: Activities negatively affect company financial distress in Malaysia.

**Profitability and Financial Distress**

Profitability is a measurement of the ability to earn profits using company assets or capital Sjahrial and Purba in Kusanti [13], [14]. Thus, if a company is not effective in managing its assets for profit, it will negatively impact it. Besides, if the company continues to experience a decline in net income, it will likely experience financial distress.

The research results by Damayanti, Yuniarta, and Sinarwati indicated that profitability affected financial distress [11]. This result is also supported by Maulidina that profitability impacted financial distress. Based on previous research and several of these theories, the following hypotheses were derived [15]:

- **H_4L**: Profitability negatively affects company financial distress in Indonesia.
- **H_4M**: Profitability negatively affects company financial distress in Malaysia.
Financial Distress in Indonesia and Malaysia

Countries in Southeast Asia, namely the ASEAN Economic Community (AEC), or commonly called the ASEAN Economic Community (AEC), in 2015 in the context of opening up free trade between countries in Southeast Asia has made the discussion about financial distress interesting to do research. Financial distress is a condition experienced by a company before facing bankruptcy. Researching financial distress will be interesting if it is done when there is global economic turmoil, such as the crises in 1998 and 2008. The impact of these two crises caused several companies to have to be delisted from stock exchanges in several countries.

Research on differences in financial distress levels has been conducted by Herlambang [18]. Herlambang stated that there were differences in the financial distress application in Indonesia and Malaysia. Meanwhile, a study between countries has also been carried out by McGee in 2008, comparing corporate governance in Indonesia, Malaysia, Thailand, and Vietnam. Therefore, it could be concluded that, of course, there were differences from one country to another. Based on the description above, a hypothesis could be formulated:

H5: There are differences in the financial distress application in Indonesia and Malaysia.

Differences in the Influence of Independent Variables on Dependent Variables in Indonesia and Malaysia

Indonesia and Malaysia have different financial reporting regulations. The financial reporting standards used by Indonesia are Statement of Financial Accounting Standards (PSAK) 1, while the financial reporting standards employed by Malaysia are the Malaysia Accounting Standards Board (MASB). Indonesia and Malaysia also have a supervisory agency in their financial reporting. However, the assertiveness and compliance in enforcing regulations in the two countries are different. As stated by Hary, Mulyadi dan Martin (2012), in their research, enforcement in Indonesia is no better than enforcement in Malaysia or Singapore.

On the other hand, Indonesia and Malaysia also have different corporate governance systems. On Law Number 40 of 2007 concerning Limited Liability Companies, Indonesia adheres to a two-tier system. Meanwhile, Malaysia tends to adhere to a one-tier system based on existing practices.

It will impact the difference in the independent variables’ influence on financial distress, given that the variables used in this study were financial reports and corporate governance.

Research carried out by Herlambang, revealed that there were differences in the influence between the size of the audit committee, the audit committee’s
independence, meetings’ frequency, financial knowledge, liquidity, leverage, and profitability on financial distress in Indonesia and Malaysia [18]. Although this study had differences in the variables’ terms used by Herlambang, the countries used to compare financial distress are the same; thus, it can be assumed that the coefficient similarity test results in this study will not be much different [18]. In other words, it is assumed that based on the coefficient similarity test results in this study, there are differences in the influence of the independent variables on the dependent variable in Indonesia and Malaysia. Based on the description above, a hypothesis could be formulated:

H₈: There are differences in the influence of Liquidity, Leverage, Activity, Profitability, the Board of Directors, and the Audit Committee on financial distress in Indonesia and Malaysia.

3. RESEARCH METHODS

Research Objects and Subjects

In this study, the objects used were manufacturing companies listed on the Indonesia Stock Exchange and the Malaysia Stock Exchange in 2017-2018. The subjects used were annual financial statements. The collection technique employed a purposive sampling method.

Research Variables

The dependent variable in the study was Financial Distress, and the Independent Variable consisted of Liquidity Ratio (CR), Leverage Ratio (DAR), Activity Ratio (TATO), Profitability Ratio (ROA), Board of Directors (DD), and Audit Committee’s Competence. The size of the dependent and independent variables is presented in Table 1.

Table 1. Dependent and Independent Variables

<table>
<thead>
<tr>
<th>No</th>
<th>Variable Name</th>
<th>Formula/Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Financial Distress</td>
<td>( ICR = \frac{\text{Operational profit}}{\text{Interest expense}} \times 100% )</td>
</tr>
<tr>
<td>2</td>
<td>Liquidity Ratio (CR)</td>
<td>( CR = \frac{\text{Current assets}}{\text{Current Debt}} )</td>
</tr>
<tr>
<td>3</td>
<td>Leverage Ratio (DAR)</td>
<td>( DAR = \frac{\text{Total Debt}}{\text{Total Assets}} )</td>
</tr>
<tr>
<td>4</td>
<td>Activity Ratio (TATO)</td>
<td>( TATO = \frac{\text{Net sales}}{\text{Total Assets}} )</td>
</tr>
<tr>
<td>5</td>
<td>Profitability Ratio (ROA)</td>
<td>( ROA = \frac{\text{Net profit}}{\text{Total assets}} )</td>
</tr>
<tr>
<td>6</td>
<td>Board of Directors (DD)</td>
<td>The number of members of the board of directors</td>
</tr>
<tr>
<td>7</td>
<td>The Audit Committee’s Competence</td>
<td>Audit Committee educational background (Penbayun and Januarti, 2012)</td>
</tr>
</tbody>
</table>

Instrument and Data Quality Test

Before testing the hypothesis, first, the descriptive statistics and classical assumption tests were presented, which consisted of a normality test [19], multicollinearity test [20], and heteroscedasticity test.

Data Hypothesis Testing and Data Analysis

Hypothesis testing comprised Multiple Linear Regression Analysis, Determination Coefficient Test, F-Value Test, T-value test, Independent Sample t-test, and Chow Test. The equations for testing the hypothesis in this study are:

\[ Zi = a + \beta_1 CR + \beta_2 DAR + \beta_3 TATO + \beta_4 ROA + \beta_5 DD + \beta_6 KOM_AUDIT + e. \]

Chow test utilized the formula:

\[ F = \frac{(RSSr - RSSUr)/k}{RSSUr/(n + n_2 - 2k)} \]

4. RESULTS AND DISCUSSION

General description of the research object

The companies as this research’s object were manufacturing companies listed on the Indonesia Stock Exchange (IDX) and the Kuala Lumpur Stock Exchange (KLSE) from 2017 to 2018.

Based on the purposive sampling method, companies that met the predetermined criteria were 242 manufacturing companies in Indonesia and 140 manufacturing companies in Malaysia. This study’s data selection was carried out through the outlier calculation stage [19].

This study utilized the outlier method casewise list. Casewise list generates data lists that do not fit the model or deviate too far from other data. This data causes the model to be less good so that it must be removed from the research model. The data affected by outliers were 11 samples for Indonesian manufacturing companies and 15 samples for Malaysian manufacturing companies. Thus, the number of data used as samples in this study amounted to 50 Indonesian manufacturing companies and 47 Malaysian manufacturing companies.

Descriptive Statistics Test

The number of sample observations in this study was 50 samples of Indonesian companies and 47 samples of Malaysian companies, respectively. Liquidity in Indonesia had a minimum value of 0.002, a maximum value of 4.494, and an average of 1.33036, with a standard deviation of 0.941042. Meanwhile, Malaysia’s liquidity had a minimum value of 0.369, a maximum value of 6.616, and an average of 1.55287, with a
standard deviation of 1.198954. Leverage in Indonesia had a minimum value of 0.080, the maximum value of 1.237, and an average of 0.59838, with a standard deviation of 0.240389. In Malaysia, the minimum value was 0.038, the maximum value was 1.040, the average was 0.49968, and the standard deviation was 0.265609. Indonesia’s activity ratio had a minimum value of 0.003, a maximum value of 2.239, an average of 0.7649, and a standard deviation of 0.368110. In Malaysia, the minimum value was 0.188, the maximum value was 2.092, the average was 0.73149, and the standard deviation was 0.398617. Indonesia’s lowest profitability was -0.158, the highest was 0.042, the average was 0.03234, and the standard deviation was 0.044526. In Malaysia, the lowest was -0.204, the highest was 0.114, the average was 0.00323, and the standard deviation was 0.070263. The lowest number of boards of directors in Indonesia was two people, the highest was six people, and the standard deviation was 1.266. In Malaysia, the lowest was four people, the highest was 12 people, and the standard deviation was 1.892. The lowest number of audit committees in Indonesia was 0, the highest was one, and the standard deviation was 0.303. Whereas in Malaysia, the lowest was 0, the highest was 1, and the standard deviation was 0.204. At last, Indonesia’s financial distress had a minimum value of -2.343, a maximum of 0.959, the average of -8.556, with a standard deviation of 404,319. In Malaysia, the minimum value was -60,982, the maximum was 0.876, the average was -7,380, and the standard deviation was 13.384.

Data Quality Test (Classical Assumption Test)

Based on the data processing results, the Asymp Sig (2-tailed) value for Indonesian companies was 0.297, and Malaysian companies were 0.174, meaning that the data were normally distributed.

The tolerance value of all independent variables in this study showed a value higher than 0.10, and the VIF (Variance Inflation Factor) value of all independent variables in this study revealed a value of less than 10. Therefore, it could be concluded that this research data did not occur to experience multicollinearity.

The significance value of each independent variable in this study was higher than (0.05). Thus, it could be concluded that the data in this study did not experience heteroscedasticity.

Hypothesis Testing

In Indonesia, the determination coefficient (Adjusted R2) was 0.340, or 34%. Meanwhile, in Malaysia, the determination coefficient (Adjusted R2) was 0.224 or 22.4%. It appears that in both countries, the R2 value was very low, indicating that the ability of the independent variable to explain variations in the change in the dependent variable was very small.

The simultaneous significance test results disclosed that in Indonesia, the significance value was 0.000, while in Malaysia, the significance value was 0.001. It signified that in the two countries, the independent variables simultaneously influenced the dependent variable.

The t-value test results in Indonesia produced a regression equation:

\[ Z_i = 1199.1 - 141.989(CR) + 1077.081(DAR) - 227.278(TATO) - 419.407(ROA) + 71.800(DD) - 146.043(KOM_AUDIT) \]

Based on the data processing results, liquidity had a negative regression coefficient of -141,989, with a significance of 0.013 < alpha (0.05), so liquidity affected Financial Distress in Indonesia. Thus, the hypothesis (H1a) was accepted. The significance value for the leverage variable was 0.148 < alpha (0.05), so leverage did not affect Indonesia’s financial distress. Therefore, the hypothesis (H2a) was rejected. The activity variable had a negative regression coefficient value of -227,278, with a significance of 0.024 < alpha (0.05) so that activity did not impact Financial Distress in Indonesia. Thus, the hypothesis (H3a) was accepted. The profitability variable’s regression coefficient value was -419,407, with a significance of 0.024 < alpha (0.05), so that profitability negatively influenced financial distress in Indonesia. Therefore, the hypothesis (H4a) was rejected. The Sig value for the board of directors’ variable was 0.170 < alpha (0.05) so that independent commissioners did not affect Indonesia’s financial distress. Thus, the hypothesis (H5a) was rejected. The Sig value for an audit committee’s existence was 0.356 < alpha (0.05) so that the existence of an audit committee did not affect Indonesia’s financial distress. Therefore, the hypothesis (H6a) was rejected.

Meanwhile, the t-value test results in Malaysia produced a regression equation:

\[ C Z_i = 23.498 - 3.554(CR) + 5.252(DAR) - 7.621(TATO) - 22.938(ROA) + 1.099(DD) - 15.255(KOM_AUDIT) \]

Based on the data processing results, the regression coefficient value of Malaysia’s liquidity variable was -3,554, with a significance of 0.013 < alpha (0.05), so that liquidity affected Financial Distress in Malaysia. Thus, the hypothesis (H1b) was accepted. The leverage variable’s significance value had a significance value of 0.625 < alpha (0.05), so leverage did not affect Malaysia’s financial distress. Therefore, the hypothesis (H2b) was rejected. The activity variable’s regression coefficient value was -7.621, with a significance value of 0.007 < alpha (0.05), so that activity did not affect Financial Distress in Malaysia. Thus, the hypothesis (H3b) was rejected. The profitability variable had a regression coefficient value of -22.938, with a significance of 0.020 < alpha (0.05), so that profitability negatively influenced Financial Distress in Malaysia. Therefore, the hypothesis
(H4b) was accepted. The variable of the Board of Directors had a significance value of 0.294 < alpha (0.05), so that the Board of Directors had no impact on Financial Distress in Malaysia. Thus, the hypothesis (H5b) was rejected. The significance value of the Audit Committee variable was 0.110 > alpha (0.05), so that the audit committee did influence financial distress in Malaysia. Therefore, the hypothesis (H6b) was rejected.

Levene’s test results are presented in Table 2. The significance value of the Levene’s test was 0.008 < alpha (0.05), meaning that there was a difference in variance between the sample companies in Indonesia and Malaysia. The Chow test is displayed in Tables 3, 4, and 5.

Table 2. Test Group

<table>
<thead>
<tr>
<th>COUNT</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICR</td>
<td>50</td>
<td>8.55675E1</td>
<td>404.319428</td>
<td>57.179402</td>
</tr>
<tr>
<td>INDON</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESIA</td>
<td>47</td>
<td>7.38028</td>
<td>13.384815</td>
<td>1.952376</td>
</tr>
<tr>
<td>MAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AYSIA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Residual Test (Indonesia)

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.369</td>
<td>6</td>
<td>.561</td>
<td>5.202</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>4.641</td>
<td>43</td>
<td>.107</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8.010</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Residual Value Test (Malaysia)

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.683</td>
<td>6</td>
<td>.447</td>
<td>3.219</td>
<td>.011*</td>
</tr>
<tr>
<td>Residual</td>
<td>5.557</td>
<td>40</td>
<td>.138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8.241</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Combined Residual Value Test

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.847</td>
<td>6</td>
<td>.030</td>
<td>4.386</td>
<td>.001*</td>
</tr>
<tr>
<td>Residual</td>
<td>11.319</td>
<td>90</td>
<td>.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19.166</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chow Test Formula:

\[
f = \frac{(\text{RSS}_r - \text{RSS}_u)/(n+n+2-k)}{(\text{RSS}_u/(n+n+2-k))}
\]

\[
= \frac{[11.319-(4.641+5.557)]/6}{(4.641+5.557)/[50+47-2(6)]}
\]

\[
= \frac{(11.319-10.198)/6}{11.319/85}
\]

\[
= \frac{1.146033}{0.1331}
\]

\[
= 8.910
\]

From the F-table with df1 = 5 and df2 = 97 with a significance level of 0.05, the F-table value was 2.17. Therefore, F-count (8.910) > F table (1.779). It could be concluded that there were differences in the influence of the liquidity ratio, leverage, activity, profitability, the board of directors, and the audit committee on financial distress in Indonesia and Malaysia. Thus, hypothesis eight (H8) was accepted.

5. CONCLUSION

Based on data analysis, hypothesis testing, and discussion, it could be concluded that liquidity negatively affected financial distress in Indonesia and Malaysia. Leverage had no impact on financial distress in Indonesia and Malaysia. The activity ratio negatively affected financial distress in Indonesia and Malaysia. Profitability negatively influenced financial distress in Indonesia and Malaysia. The Board of Commissioners did not impact financial distress in Indonesia and Malaysia. The audit committee’s competence did not influence financial distress in Indonesia or Malaysia. There were differences in the financial distress level in Indonesia and Malaysia. Besides, there were differences in the influence of the liquidity ratio, leverage, activity, profitability, independent commissioners, and audit committee on financial distress in Indonesia and Malaysia.

REFERENCES


