

## Relationship Between Financial Distress and Earnings Management

Inayatul Sabilla Azahro<sup>1</sup>, Diah Hari Suryaningrum<sup>2\*</sup>

Akuntansi, Universitas Pembangunan Nasional "Veteran" Jawa Timur, Indonesia

\*Corresponding Email: [diah.suryaningrum.ak@upnjatim.ac.id](mailto:diah.suryaningrum.ak@upnjatim.ac.id)

---

### Abstract

*This research aims to examine the correlation between company financial difficulties and the manipulation of financial reports using earnings management techniques. Apart from that, this research also intends to reveal the relationship between financial difficulties and earnings management. The Altman Z-score is used to evaluate the company's financial health. In contrast, the Beneish M-score and the modified Jones model are used to ensure the existence of earnings management practices. Financial reports for the 2018-2022 period from 567 companies on the Indonesia Stock Exchange were collected as samples based on a purposive sampling mechanism. Pearson's chi-square test, Cramer's V test, and correspondence analysis were applied to test the existing hypotheses. The results of this research prove a link between financial distress and earnings management practices. Apart from that, companies in the gray and healthy zones are more likely to manipulate profits. This research implies that financial distress and earnings management can be measured and detected by anyone so that all users of financial reports will not be harmed when fraud occurs.*

**Keywords:** Financial Distress, Earnings Management, Beneish M-score, Modified Model Jones, Altman Z-score

**JEL Code:** G01, M41, M42

---

## INTRODUCTION

All companies in the world must face market conditions and external challenges. Globalization has made the world borderless. The market becomes freer because there are no barriers or interventions from each country ([Wulandari, 2022](#)). Thus, the products and services produced must be of global standard to compete ([Rambe & Aslami, 2022](#)). These conditions and challenges can destabilize the company, especially in the financial sector. In addition, the pandemic has resulted in a global economic crisis ([Hutagaol et al., 2022](#)), which can worsen the company's financial condition (financial distress) and even lead to bankruptcy. A company experiencing financial distress can be indicated if there is a substantial decrease in sales and revenue, a decrease in profit or cash flow from operations, a decrease in total assets, a significant decrease in stock market price, experiencing losses/failures in high-risk industries, young companies, and a significant reduction in dividends ([Qisthi et al., 2013](#)).

Based on agency theory, management as an agent in this situation is obliged to save the company's financial position because it is one of the essential indicators of going concern for a company ([Sari, E. N. et al., 2023](#)). Management is required to make strategic and timely decisions so that investor confidence does not fade and the company's value remains stable ([Gavurova et al., 2020](#); [Valaskova et al., 2021](#)) because financial statements are a signal that if received in a negative state, it reflects poor company performance ([Bae et al., 2018](#)).

Based on various studies, companies that are experiencing financial distress often use earnings management strategies to save the company ([Kamau et al., 2022](#); [Kurniawan et al., 2022](#); [Li et al., 2020](#); [Siekelova, 2021](#)). Earnings management refers to the conscious process undertaken by management following accounting standards to achieve a certain amount of reported earnings. An increase in disclosed earnings has the potential to increase the corporate valuation, while a decline in profits may indicate a decrease in the corporate valuation ([Valaskova et al., 2021](#)). Earnings management procedures include a series of strategies, such as the selection and application of accounting techniques, the timing of accounting techniques, and the timing of accounting techniques ([Sulistiyanto, 2018](#)).

In Indonesia, several listed companies, such as PT Garuda Indonesia (GIAA) and PT Envy Technologies (ENVY), carried out earnings management practices. GIAA carried out earnings management practices in its 2018 financial statements. In that period, GIAA recorded revenue from cooperation with PT Mahata Aero Teknologi, which should still be receivable. Thus, GIAA reported positive financial results or experienced profits ([CNN Indonesia, 2019](#)). Apart from GIAA, PT Envy Technologies Indonesia (ENVY) is also suspected of performing earnings management activities in its 2019 financial statements. After the IPO, ENVY consolidated its financial statements with its subsidiary, PT Ritel Global Solusi (RGS). It should be noted that RGS did not produce any financial statements during the 2019 fiscal year. As such, ENVY's financial statements for 2019 show a significant jump in sales and net profit. ENVY recorded a significant revenue gain in 2019 of Rp188.58 billion, so ENVY's net profit also increased to Rp8.05 billion in 2019 ([Christian et al., 2022](#)).

Based on these two cases, users are disadvantaged due to the falsification of the nominal stated in the financial statements, so it does not match the actual situation. GIAA and ENVY also confirm the findings of several previous studies that explain the immediate link between financial distress and earnings management ([Kamau et al., 2022](#); [Kurniawan et al., 2022](#); [Li et al., 2020](#); [Siekelova, 2021](#); [Valaskova et al., 2021](#)). However, there has yet to be much research on financially distressed companies facing the challenges of globalisation and the pandemic, especially those in Indonesia. Using the two cases of GIAA and ENVY as a starting point to find out more about the situation in Indonesia, the researcher proposes to investigate the connection between earnings management practices and financial distress with several research questions posed as follows:

- a. Is there a dependency between financial distress and the probability of financial statement manipulation through the execution of earnings management strategies?
- b. Is there a connection between financial distress and earnings management?

This research contributes to the literature by examining the relationship between financial distress and earnings management through two different models for detecting earnings management: the Beneish M-score and the Jones model. By combining these two models, this research provides a comprehensive approach to detecting earnings management practices. The novelty of this research lies in the simultaneous use of these two models to analyze the relationship between financial distress and earnings management. Most previous studies only focus on one model for detecting earnings management. By combining these two models, this research offers deeper and broader insight into how financial difficulties can encourage companies to carry out earnings management. Thus, this research not only provides theoretical contributions to the accounting and finance literature but also provides practical implications for investors, creditors, and regulators in understanding and detecting earnings management practices in companies at high risk of bankruptcy.

## LITERATURE REVIEW AND HYPOTHESIS FORMULATION

### Agency Theory

The theory proposed by [Jensen & Meckling \(1976\)](#) explains the existence of a principle (shareholder) and agent (management) relationship with agents acting on behalf and in the interests of principle receiving a certain reward for their efforts. Such relations are generally articulated through the exploitation of contractual agreements. In agency theory, agents are usually characterized as individuals who can optimize their own interests, while trying to comply with the terms of a contract agreement. Efficiency in the contract is characterized by its ability to provide incentives to the parties bound by the contract to fulfil the obligations that have been agreed without dispute, while ensuring that the principle achieves the most beneficial outcome of the alternative action carried out by the agent.

### Signaling Theory

According to [Spence, 1973](#), the theory of signals suggests that the sender, in this case management, conveys information in the form of a signal that indicates the condition of the company to its recipient, the investor. Signals are given as information about the state of the company to its owners and other related stakeholders. According to [Boateng, 2019](#), investors' decisions can be influenced by the signals delivered by management, regardless of whether those signals are positive or negative [\(Bae et al., 2018\)](#). Financial reporting is one of those signals.

### Hypothesis Development

Monitoring the financial status of a firm is crucial importance in achieving business sustainability because a key indication of its current condition is the organization's financial situation. This aligns with the theory of signals that indicate to investors that the figures in the financial statements provide a representative of the organization's productivity [\(Spence, 1973\)](#).

Aiming to enhance and create a good image also as a result of evolving market conditions and constant pressure from competitors, companies are encouraged to adapt their strategies and operations to match existing market conditions. Based on the theory of agency, managers as agents act for the principled interests of [Jensen & Meckling \(1976\)](#) so managers possess a knack for take actions that have the potential to change the future of the firm. These decisions can be the determination of the direction and future trends of the company with the aim of attracting investors and improving its competitiveness. According to [Gavurova et al. \(2020\)](#), measuring corporate competitiveness and the economy is a significant economic metric.

All logical businessperson launches a firm with the objective of attaining success. Nonetheless, based on the current life cycle, a company eventually reaches a crucial stage where it must implement tactical modifications with the goal to ensure its survival in a competitive business environment. The critical point is when financial stability is disrupted, when according to [Kristanti \(2019:3\)](#) the company is experiencing an inability to fulfill its financial obligations or is encountering financial difficulties. One adjustment that can be made is the use of an earnings management

strategy which according to [Sulistyanto \(2018:44\)](#) is an activity to regulate the amount of profit by either increasing or decreasing it. An advance in revenue indicates an advance in the company's value, while a decrease in revenues indicates a decline in the value of the company.

As found by [Li et al. \(2020\)](#), financially troubled organizations often get involved in greater management of earnings according to accruals and reduced evident earnings management. Another support for this conclusion also stated by [Kamau et al. \(2022\)](#) who researched four large companies in Kenya with the result indicated that organizations experiencing financial difficulties are especially susceptible to engaging in profit manipulation. Conversely, organizations that engage in earnings management are likely to experience financial difficulties at some stage. [Siekelova \(2021\)](#) research demonstrates a highly significant correlation between the chosen variables that assess the financial stability of a firm and the degree to which the organization applies smart profit management methods. This fact can have a substantial impact on the perception of financial stability as measured by metrics derived from financial statements.

*H1: There is a dependence between financial distress and possible earnings management*

For further identification, [Valaskova et al. \(2021\)](#) was able to reveal the relationship between company financial conditions and earnings management practices in Visegrad countries. In his research, two groups (companies experiencing financial difficulties and companies in the gray zone) can be identified as companies that regularly manipulate profits.

*H2: There's a connection between financial distress and earnings management*

## METHODOLOGY

Financial distress and earnings management are the subjects of this quantitative study, which sets up a correlational research design. Annual reports for the years 2018–2022, covering all companies registered on the IDX became the object of this research with purposive sampling as a sample selection technique. Based on three sample criteria, 567 companies were gained.

Data from 567 companies were measured for financial distress using the Altman Z-score with the following formula ([Altman, 1983](#)):

$$Z = 1,2X_1 + 1,4X_2 + 3,3X_3 + 0,6X_4 + 1X_5 \dots\dots\dots (1)$$

Notes:

$$X_1 = \frac{\text{Working Capital}}{\text{Total Assets}} \dots\dots\dots (1.1)$$

$$X_2 = \frac{\text{Retained Earnings}}{\text{Total Assets}} \dots\dots\dots (1.2)$$

$$X_3 = \frac{\text{Earnings Before Interest and Tax}}{\text{Total Assets}} \dots\dots\dots (1.3)$$

$$X_4 = \frac{\text{Book Value of Equity}}{\text{Book Value of Total Debt}} \dots\dots\dots (1.4)$$

$$X_5 = \frac{\text{Sales}}{\text{Total Assets}} \dots\dots\dots (1.5)$$

The results of the Altman Z-score measurement are recorded on a nominal scale with the following conditions:

- a. If the Z value > 2.99 → The company is in the Safe Zone / Low-Risk Area, it can be considered healthy.
- b. If the value of 1.8 < Z < 2.99 → The company is in the Grey Zone / Uncertain Area, it cannot detect financial health conditions.
- c. If the Z value < 1.8 → The company is in the Distress Zone / High Risk of Bankrupt so that it is at high risk of bankruptcy

The possibility of earnings management practices is detected with 5 Beneish M-score ratios with the following formula:

$$DSRI = \frac{\text{Net Recievable}_{(t)} / \text{Sales}_{(t)}}{\text{Net Recievable}_{(t-1)} / \text{Sales}_{(t-1)}} \dots\dots\dots (2)$$

$$GMI = \frac{(Sales_{t-1} - COGS_{t-1}) / Sales_{t-1}}{(Sales_t - COGS_t) / Sales_t} \dots\dots\dots (3)$$

$$AQI = \frac{1 - \frac{Current\ Asset_t + Fixed\ Asset_t}{Total\ Asset_t}}{1 - \frac{Current\ Asset_{t-1} + Fixed\ Asset_{t-1}}{Total\ Asset_{t-1}}} \dots\dots\dots (4)$$

$$SGI = \frac{Sales_t}{Sales_{t-1}} \dots\dots\dots (5)$$

$$TATA = \frac{\Delta Current\ Asset_t - \Delta Cash_t - \Delta Tax\ Payable_t - Depreciation\ \&\ Amortization_t}{Total\ Asset} \dots\dots\dots (6)$$

Where t is the year being calculated or the current year, and t-1 is the previous year as the base year (Beneish, 1999).

Table 1. Beneish M-score Scoring

Ratio Index	Parameter Index		
	Non Manipulator	Grey Company	Manipulator
DSRI	≤ 1,031	1,031 < index > 1,465	≥ 1,465
GMI	≤ 1,014	1,014 < index > 1,193	≥ 1,193
AQI	≤ 1,039	1,039 < index > 1,254	≥ 1,254
SGI	≤ 1,134	1,134 < index > 1,607	≥ 1,607
TATA	≤ 0,018	0,018 < index > 0,031	≥ 0,031

Based on the results of the five ratio indices, companies can be categorized into three groups, namely non-manipulators, grey companies, and manipulators, with the following calculations (Christy & Stephanus, 2018):

- ≥3 indices manipulator so the company classified as manipulator.
- ≥3 indices non-manipulator so the company classified as non-manipulator.
- ≥3 indices grey company or fails to meet the two categorisation requirements of manipulator and non-manipulator so the company classified as a grey company.

Results then reconfirmed using a modified Jones model with the ensuing steps (Dechow et al., 1995):

- Count total accruals (TA) by means of net income minus operating cash flow.

$$TA_{it} = NI_{it} - CFO_{it} \dots\dots\dots (7)$$

- TA is then estimated with Ordinary Least Square.

$$\frac{TA_{it}}{A_{it-1}} = \beta_1 \left( \frac{1}{A_{it-1}} \right) + \beta_2 \left( \frac{\Delta REV_{it}}{A_{it-1}} \right) + \beta_3 \left( \frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon \dots\dots\dots (8)$$

- With the regression coefficient in the third step, the nondiscretionary accruals (NDA) can be formulated as follows:

$$NDA_{it} = \beta_1 \left( \frac{1}{A_{it-1}} \right) + \beta_2 \left( \frac{\Delta REV_{it}}{A_{it-1}} - \frac{\Delta REC_{it}}{A_{it-1}} \right) + \beta_3 \left( \frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon \dots\dots\dots (9)$$

- Discretionary accruals (DA) as a measure of earnings management can be calculated with:

$$DA_{it} = \frac{TA_{it}}{A_{it-1}} - NDA_{it} \dots\dots\dots (10)$$

After each variable was measured, Pearson's chi-square test with a significance level of 0.01 and Cramer's V test were used to answer questions related to the dependence between the two variables. Subsequently, correspondence analysis explained the relationship between financial distress and earnings management.

## RESULTS AND DISCUSSION

### Result

The first results are related to the differentiation between the manipulator and non-manipulator companies based on the Beneish and Jones Model, as depicted in Table 2.

Table 2. Crosstab between Beneish M-score and the Modified Jones Model

Beneish	Jones		Manipulator	Non Manipulator
	0	1		
2018	0	379	5,47%	66,84%
	1	0		
2019	0	418	4,76%	73,72%
	1	0		
2020	0	451	3,70%	79,54%
	1	0		
2021	0	439	3,53%	77,43%
	1	0		
2022	0	394	4,41%	69,49%
	1	0		

Source: Own research (2023)

Based on Table 2, companies in Indonesia are recorded as less likely to manipulate reported earnings. This can be seen from the number of non-manipulator companies, which is 85-91% more each year than manipulator companies. It can be interpreted that companies in Indonesia have presented financial statements as they are and following accounting standards.

Table 3. Chi-square Pearson and Cramer's V test result with SPSS 25

Year	P-value of Pearson chisquare test	Decision	Cramer's V	P-value of Cramer's V	Decision
2018	0.000	H1	0.323	0.000	Sig. strong association
2019	0.000	H1	0.351	0.000	Sig. strong association
2020	0.000	H1	0.361	0.000	Sig. strong association
2021	0.000	H1	0.334	0.000	Sig. strong association
2022	0.000	H1	0.308	0.000	Sig. strong association

Based on table 3, the Asymptotic Significance (2-sided) value is 0.000 in 2018-2022 with an agreed significance level of 0.01, so there is a interconnection between financial difficulties and earnings management. While the contingency coefficient (Cramer's V) in the 2018 period is 0.323; in the 2019 period, it is 0.351; in the 2020 period, it is 0.361; in the 2021 period, it is 0.334; and in the 2022 period, it is 0.308. The largest contingency coefficient was recorded in the 2020 period, which was 0.361, which means that the relationship between the financial distress variable and earnings management was the closest in this period.

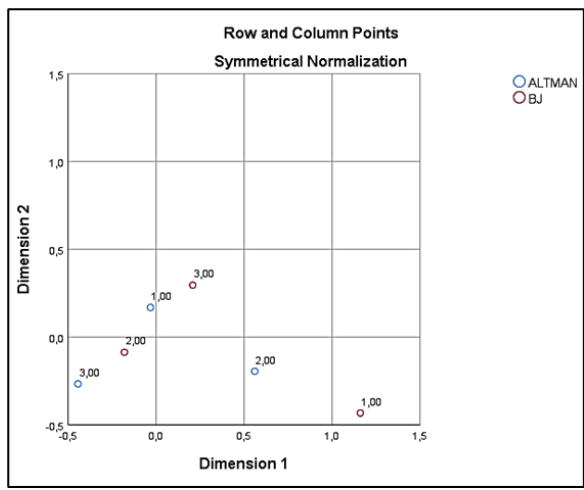


Figure 1. 2018 Correspondence Map

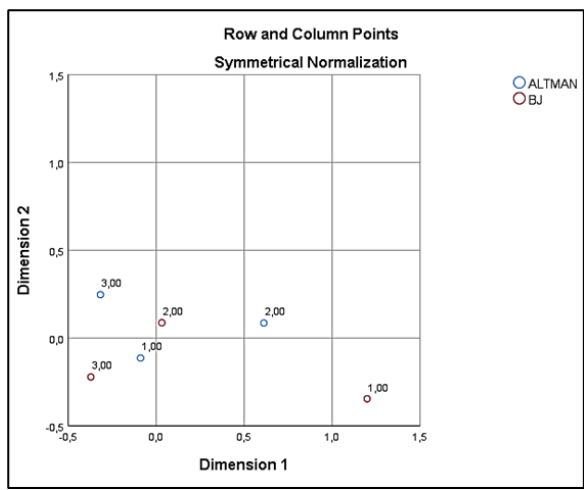


Figure 2. 2019 Correspondence Map

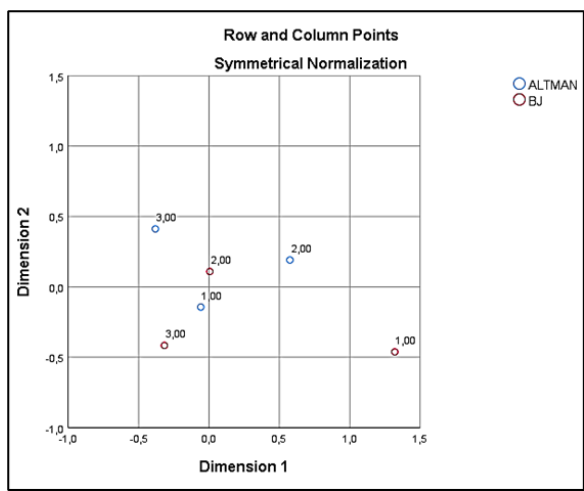


Figure 3. 2020 Correspondence Map

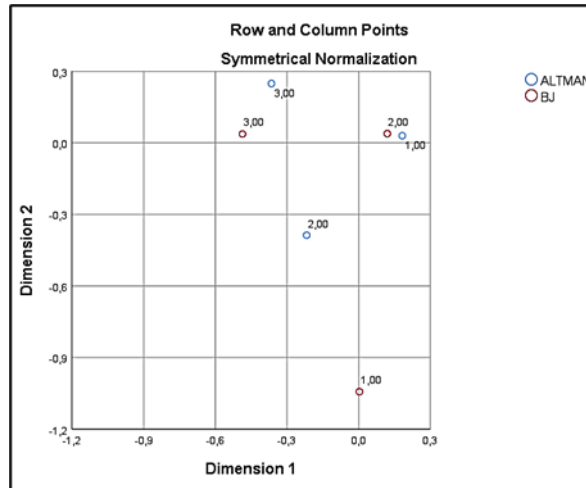


Figure 4. 2021 Correspondence Map

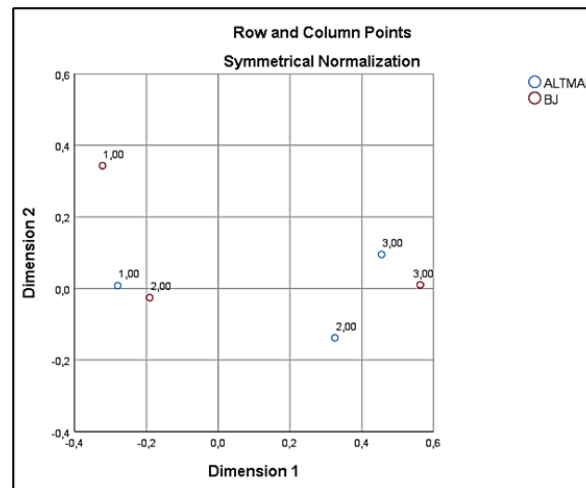


Figure 5. 2022 Correspondence Map

Based on Figures 1 to 5, companies that tend to practice earnings management are those experiencing financial difficulties/high risk and those whose financial conditions are fine/low risk. This is evidenced by the correspondence map in the period 2018 to 2021, where the manipulator point (1.00) is closer to the low risk (2.00), and in the 2022 period, the manipulator point (1.00) is closer to the high-risk point (1.00).

#### Discussion

Both variables were tested with Pearson's chi-square to determine the presence of dependence. The results show that there is dependence between variables, which is also confirmed by [Valaskova et al. \(2021\)](#) in their research, which states that earnings manipulation is affected by how stable the financial condition of companies in Visegrad countries and financial health information is an excellent indicator to detect earnings manipulation. In addition, the same hypothesis is also accepted in [Siekelova's](#) research ([2021](#)), that reveals a statistically significant correlation between indices of financial stability and the intensity of earnings management practices.

Cramer's V was then run to ascertain the extent of correlation between the two variables. The results of the Cramer's V test in each period are significant and have a value of more than 0.000, so it can be concluded that there is a close relationship between financial difficulties and earnings management, with the closest relationship occurring in the 2020 period. The results of the visualization of the relationship between financial distress and earnings management in companies

in Indonesia are stronger when compared with the results of research in Visegrad by [Valaskova et al. \(2021\)](#) which was less than 1%.

The test results with Pearson's chi-square and Cramer's V are in line with agency theory related to the agent's role as task executor and decision maker so that the agent justifies the use of earnings management strategies when the company is in financial difficulty so that the incentives received remain large while securing the company's position in the market. The strategy used is overstatement through increased accrual transactions in revenue recognition even though less cash is generated ([Beneish, 1999](#)), evidenced by the results of manipulation through the TATA ratio, which was carried out 650 times. This test's findings are consistent with signal theory as well, where management seeks to send positive signals to investors in the form of more profit than they should so that investor confidence in the company is not lost ([Sulistyanto, 2018](#)).

The correspondence analysis results show that companies that tend to practice earnings management are those experiencing financial difficulties and whose financial condition is fine/low risk. This is evidenced by the correspondence map in the period 2018 to 2021, where the manipulator point (1.00) is closer to the low risk (2.00), and in the 2022 period, the manipulator point (1.00) is closer to the high-risk point (1.00). These discoveries are further substantiated by research of [Valaskova et al. \(2021\)](#) on companies in Visegrad, which states that earnings manipulation is commonly carried out by companies in the grey zone and experiencing financial difficulties.

The results stating that companies with healthy financial conditions manipulate earnings are consistent with agency theory related to contractual agreements with principals in the form of incentives, making agents obligated to fulfil the expectations of principals ([Kurniawan et al., 2022](#)). Expectations of stable and even increasing profits make agents use earnings management practices when profits are less than the target or decrease even though the company's financial condition is still in the healthy category. Furthermore, principals also expect agents to be able to minimize tax liabilities that must be paid.

The results stating that companies experiencing financial difficulties manipulate earnings are consistent with agency theory related to the role of agents as task executors so that agents look for ways so that the company does not go bankrupt, default, or get the threat of delisting from the IDX ([Kurniawan et al., 2022](#)). Agents also strive to perform as well as possible to maintain the incentive amount.

In addition to agency theory, the correspondence analysis results are also consistent with signaling theory. Companies at high risk of bankruptcy want to convey positive signals due to trying to meet market expectations while maintaining a competitive position and having access to financing even though financial conditions are not okay ([Valaskova et al., 2021](#)). Like a healthy company, management seeks to convey positive signals to fulfil market expectations so that share prices or valuations do not fall and to provide a perception of stability and reliability to attract new investors.

## CONCLUSION

This study concludes that there is an interconnection between the variables of financial distress and earnings management, with the 2020 period as the year in which the relationship between these variables is the closest and companies manipulate earnings the most. Each category of results from each financial distress and earnings management was analyzed by correspondence analysis, resulting in the finding that companies experiencing financial distress and healthy financial conditions are more probable to practice earnings management.

The constraint of this study resides in the research results that only explain the relationship between the two variables without explaining in depth how the relationship occurs. In addition, the limitations of this study also assume that companies in the grey zone have a healthy financial condition without re-measuring with other measurement concepts. The outcomes of this study have implications that financial distress and earnings management practices can be measured and detected by anyone so that investors can be more careful in choosing issuers, auditors are helped in

the audit process, creditors do not misjudge the financial ability of a company, and regulators get excellent and accurate financial reports.

Future researchers are expected to use eight Beneish M-score ratios to enrich the research results and find the most widely used earnings management strategies to manipulate earnings. Future researchers are also expected to utilize other detection concepts with the same number of output categories as the Beneish M-score output categories to facilitate the reconfirmation process in detecting earnings management.

## REFERENCES

- Altman, E. I. (1983). *Corporate financial distress: a complete guide to predicting, avoiding, and dealing with bankruptcy*. <https://api.semanticscholar.org/CorpusID:166991892>
- Bae, S. M., Masud, M. A. K., & Kim, J. D. (2018). A cross-country investigation of corporate governance and corporate sustainability disclosure: A signaling theory perspective. *Sustainability (Switzerland)*, *10*(8). <https://doi.org/10.3390/su10082611>
- Beneish, M. D. (1999). The Detection of Earnings Manipulation. *Financial Analysts Journal*, *55*(5), 24–36. <http://www.jstor.org/stable/4480190>
- Boateng, S. L. (2019). Online relationship marketing and customer loyalty: a signaling theory perspective. *International Journal of Bank Marketing*, *37*(1), 226–240. <https://doi.org/10.1108/IJBM-01-2018-0009>
- Christian, N., Resnika, Yukie, H., Sitorus, R., Angelina, V., Sherly, & Febrika. (2022). Pendeteksian Fraudulent Financial Reporting dengan Earnings Manipulation Financial Shenanigans: Studi Kasus PT Envy Technologies Indonesia Tbk. *Jurnal Ilmiah Akuntansi Dan Bisnis*, *7*(1), 2528–1216. <https://doi.org/10.38043/jiab.v7i1.3543>
- Christy, Y. E., & Stephanus, D. S. (2018). Pendeteksian Kecurangan Laporan Keuangan dengan Beneish M-Score pada Perusahaan Perbankan Terbuka. *Jurnal Akuntansi Bisnis*, *16*(1), 19–41. <https://doi.org/10.24167/jab.v16i2.1560>
- CNN Indonesia. (2019, April 30). *Kronologi Kisruh Laporan Keuangan Garuda Indonesia*. CNN Indonesia. <https://www.cnnindonesia.com/ekonomi/20190430174733-92-390927/kronologi-kisruh-laporan-keuangan-garuda-indonesia>
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting Earnings Management. *The Accounting Review*, *70*, 193–225. <https://www.jstor.org/stable/248303>
- Gavurova, B., Ivankova, V., Rigelsky, M., & Privarova, M. (2020). Relations Between Tourism Spending and Global Competitiveness: an Empirical Study in Developed OECD Countries. *Journal of Tourism and Services*, *11*(21), 38–54. <https://doi.org/10.29036/jots.v11i21.175>
- Hutagaol, Y. R. T., Sinurat, R. P. P., & Shalahuddin, S. M. (2022). Strategi Penguatan Keuangan Negara Dalam Menghadapi Ancaman Resesi Global 2023 Melalui Green Economy. *Jurnal Pajak Dan Keuangan Negara*, *4*(1S), 378–385. <https://doi.org/10.31092/JPKN.V4I1S.1911>

- Jensen, M. C., & Meckling, W. H. (1976). Theory Of The Firm: Managerial Behavior, Agency Costs And Ownership Structure. In *Journal of Financial Economics* (Vol. 3). Q North-Holland Publishing Company. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kamau, C., Banafa, A., & Kariuki, S. (2022). *Correlation between Earnings Management and Financial Distress among Selected Firms in Kenya*. <https://doi.org/10.21203/rs.3.rs-1643310/v3>
- Kristanti, F. T. (2019). *Financial Distress : Teori dan Perkembangannya Dalam Konteks Indonesia*. Inteligencia Media.
- Kurniawan, F., Pusparini, N. O., Amanati, H. T., & Nugroho, A. H. L. (2022). A Cross Country Analysis of Financial Conditions and Earnings Management. *Journal of Accounting and Strategic Finance*, 5(1), 134–150. <https://doi.org/10.33005/jasf.v5i1.256>
- Li, Y., Li, X., Xiang, E., & Geri Djajadikerta, H. (2020). Financial distress, internal control, and earnings management: Evidence from China. *Journal of Contemporary Accounting and Economics*, 16(3). <https://doi.org/10.1016/j.jcae.2020.100210>
- Qisthi, D., Suhadak, & Handayani, S. R. (2013). Analisis X-Score (Model Zmijewski) untuk Memprediksi Gejala Kebangkrutan Perusahaan. *Jurnal Administrasi Bisnis*, 1(2), 68–77. <http://administrasibisnis.studentjournal.ub.ac.id/index.php/jab/article/view/41>
- Rambe, D. N. S., & Aslami, N. (2022). Analisis Strategi Pemasaran Dalam Pasar Global. *El-Mujtama: Jurnal Pengabdian Masyarakat*, 1(2), 213–223. <https://doi.org/10.47467/elmujtama.v1i2.853>
- Sari, E. N., Irianto, B. S., Widianingsih, R., & Rafinda, A. (2023). The Effect of Green Accounting and Carbon Emission Disclosure on Firm Value (Case Study on Consumer Non Cyclical Company Listing Indonesia Stock Exchange in 2019-2022). International Conference Sustainable Competitive Advantage.
- Siekelova, A. (2021). The Impact of the Financial Stability on the Earnings Management Practices. *SHS Web of Conferences*, 129, 03028. <https://doi.org/10.1051/shsconf/202112903028>
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355–374. <https://doi.org/10.2307/1882010>
- Sulistyanto, S. (2018). *Manajemen Laba: Teori dan Model Empiris* (Vol. 2). PT Grasindo.
- Valaskova, K., Androniceanu, A. M., Zvarikova, K., & Olah, J. (2021). Bonds between Earnings Management and Corporate Financial Stability in the Context of the Competitive Ability of Enterprises. *Journal of Competitiveness*, 13(4), 167–184. <https://doi.org/10.7441/JOC.2021.04.10>

Wulandari, D. I. (2022). Peningkatan Perekonomian di Indonesia Melalui Pasar Bebas. *Jurnal Inovasi Sektor Publik*, 2(1).  
<http://jurnal.uwp.ac.id/fisip/index.php/jisp/article/view/123>