Property Company Condition in IKN Phenomenon Using Bankruptcy Models

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Abstract

Purpose: Amid the significant shift of the capital city relocation to IKN, it is essential to determine whether property companies are navigating within a zone of financial distress or maintaining a position of financial stability and safety.

Methodology/approach: The researcher uses the Altman Z-Score, Springate, Ohlson, and Zmijewski models to determine the condition of property companies, whether they are in the distress zone or the safe zone.

Results/findings: This study shows that in 2019 - 2023 there are 3 company on distress zone, 4 company on gray zone, 68 company on Safe zone using Altman Z-Score, for Springate there are 49 in distress zone and 22 in safe zone, for Ohlson 28 in distress zone and 47 in safe zone, for Zmijewski there are 1 in Distress Zone and 74 in safe zone.

Conclusion: The study finds that most companies are classified as financially safe by the Altman and Zmijewski models, while the Springate and Ohlson models identify more companies in distress, especially during 2020–2021.

Limitations: This study is limited to property companies, and only the condition is considered. The accuracy of the four bankruptcy models, namely, the Altman Z-score, Springate, Ohlson, and Zmijewski models, is not measured.

Contribution: This study contributes to those who need to see the company property condition, whether the company is in financial distress or not. It is hoped that this study will help others, whether researchers or civilians, to understand the condition of property companies.

Keywords: IDX, IKN, Finance, Financial Distress, Property.

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1. Introduction

Jakarta's designation as capital city is legally mandated by Law Number 29 of 2007(Tawil & Rahmarini, 2022). The urgency of this research lies in capital city relocation. The capital serves as the location for a country's government center, encompassing executive, legislative, and judicial administrative elements. In 2019, discussions about relocating the capital emerged, and formal regulations for this move were introduced in 2021, with plans for completion by 2024. The emergence of these discussions and regulations has generated significant upheaval among the Indonesian populace, particularly regarding economic aspects. This is because the capital is central to daily national activities, including both government and private sector economic functions. This research was based on sparks namely capital relocation. Capital relocation that is being planned by government turns out to have an economic impact toward the new area (Hasibuan & Aisa, 2020). It cannot be denied that the relocation of the

capital is an activity that bring huge impact to economy. The impact that relocation bring will affect human's basic needs which comprise of cood, clothing, and housing.

The rise of Jakarta, capital city of Indonesia has an influence on too-centralized economic development, resulting in the centralization of the national economy. As a result, Jakarta is becoming increasingly congested with migrants from diverse locations hoping to improve their economic lives, resulting in rapid urbanization (Amelia, 2023)Relocating capital to IKN is one of many strategies to fight against population density in Java Island (Saraswati & Adi, 2022). The opposite means that the relocation will increase population density in the new place where the capital will be relocated. Increased concentration of population density also bring many demand, one of it is housing. The objectives of this research is to see property company condition in the upheaval of capital city relocation. Many companies are trying to have offices near the capital city in the hope that if their economic activities require intervention or assistance from the state, they can easily solve it without having to prepare a transportation budget to the capital(Taufiq, 2020). Economic activities on property side also experiencing turmoil that appear from capital relocation. In this research, the author wants to see the condition of property companies listed on the IDX regarding the turmoil called capital relocation. By looking at the company's condition using the Altman Z-Score, Springate, Ohlson, and Zmijewski models. Four model is used because all four model is created for the purpose of to see whether one's company is in bad condition or not and there are little to none paper that used all four models as can be seen on this paper references such as but not limited to Yayu Kusdiana that only discuss about Altman Z-Score and Springate only. Condition of this company will be displayed in the form of a bar chart with a time span of 2019 - 2023.

2. Literature Review and Hypothesis Development

This research is based on the upheaval called moving the country's capital. Capital city relocation being planned by the government turns out to have an economic impact on the new area (Hasibuan & Aisa, 2020). It cannot be denied that the transfer activity is an activity that has a big impact on the economy. This IKN phenomenon is driving the sustainability of property companies (Alexander, 2024). Property is an important component in human life. The absence of property will hamper all human activities, both economic activities and daily. By looking at the condition of the company in terms of its financial statements, we can analyze how the condition of property companies is facing this turmoil, namely the transfer of capital. Home is one of the three basic human needs. If these basic needs cannot be met, then the level of community welfare can be said to be quite low. Property companies are one of the business actors that provide not only residential needs such as houses and/or housing but also workplaces such as office buildings.

Financial Distress is the start line when a business can no longer meet its payment schedule or when cash flow conditions state that the company is unable to fulfill the company's obligations. According to Dewi (2024), financial distress is a condition in which a company experiences a decline in profit that can result in losses and lead to bankruptcy. It refers to a situation in which an individual or business experiences significant financial difficulties or challenges (Agbo & Egbunike, 2024). Financial distress is a condition in which a company experiences serious problems in terms of liquidity (Lewier et al., 2024). According to Salim & Dillak (2021), financial distress is defined as a condition of financial difficulty experienced by a company with decreasing profit and inability to pay off its obligations as presented based on comparison between current financial report with the previous financial report. First symptom when company is experiencing financial distress are decreasing in stock price and increasing in company debts (Laksmiwati & Priyanto, (2020); Manan & Hasnawati, (2022)) The consequence of closing business premises and factories has a negative impact on the company's cash flow so that the company can experience financial distress (Mihelle & Lukman, 2024). Financial difficulties are described between two extreme points, namely short-term liquidity difficulties or the mildest to insolvency (Hanafi & Halim, (2016); Putri & Putri, (2024)). Financial distress is the first thing that come before bankruptcy on a company, in this condition it can be said that company is having a decrease of capital which also causes by decrease of sales or profit. Financial distress is a condition of the company that experiencing liquidity, but still in solvent state (able to pay debts) (Sumarni, 2022). The cost of financial distress can erode shareholder wealth, as firms facing financial difficulties may be forced to

sell assets at below-market price or forgo potentially lucrative projects in favor of reducing debt exposure(Ikwuo et al., 2025). This condition is something that all company stakeholders want to avoid. Altman Z-Score is a model that shows companies that are in financial difficulty / Distress Zone or healthy / Safe zone. Altman has combined several ratios into a company bankruptcy prediction model using a technique called discriminant analysis. The results of this combination of ratios became known as the Z-Score. Originally, the Z-Score algorithm was developed for manufacturing companies traded on the stock market, using a formula based on five financial metrics(Saha, 2024). According to Moradi & Beigi (2020), the constructed model consist of five financial ratios weighted by the discriminant analysis method and performed with the Z-square function in which financial statements are independent variables. Financial distress analysis using Altman, Springate, and Zmijewski model is known for being accurate as a material for assesing and considering company's condition(Martini et al., 2021). Altman model have a high level of accuracy which is 95% against the company that experiencing financial distress(Nusyirwan et al., 2023). The Altman model used in this research is called the Modified Altman Z-Score model.

Z = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4

X1 = Working Capital/Total Assets

X2 = Retained Earnings/Total Assets

X3 = Earnings before Interest and Taxes/Total Assets

X4 = Market Value of Equity/Total Assets

Result from Altman Z-Score model can be described with this criteria.

Z > 2,6-"Safe" Zone 1,10 < Z < 2,6-"Gray" Zone Z < 1,10-"Distress" Zone

Springate, just like Altman is one of the model that is capable to show company's condition, whether it's in healthy condition or not. This model appear 10 year after Altman model is stated. Springate model is developed on 1978 using multiple discriminant analysis (Nurlaila et al., 2021). Multiple discriminant analysis is a statistical analysis techniques which identified some of finance ratio which have important influence in affecting event, hence this technique then developed into a model to simplified conclusion from some events (Sunaryo, (2015); Nusyirwan et al., (2023)). Initial number of ratio is 19, after using the same testing as Altman, Springate choose 4 ratio which is believed can differentiate between a company with financial distress and company with not a financial distress (Nurlaila et al., 2021). Here is the Springate model.

S = 1.03X1 + 3.07X2 + 0.66X3 + 0.4X4

X1 = working capital/total assets

X2 = earning before interest tax/total assets

X3 = earning before interest tax/current liabilities

X4 = sales/total assets

Result from Springate model can be described with this criteria.

S > 0,862-"Safe" Zone S < 0,862-"Distress" Zone

Ohlson is a model that can show whether a company is healthy or not. Ohlson's model employs data from standard financial statements (income statement, balance sheet, and cash flow statement) to generate a quantifiable result expressed as a percentage, thereby enhancing the interpretability of the model's findings (Restianti & Agustina, (2018);Seno Pamungkas, (2023)). Altman model and Ohlson model is a valuable method for companies to take into account the company's bankruptcy prediction(Najib & Cahyaningdyah, 2020). Here's Ohlson's model

X1 = total assets/GNP price level index

X2 = total liabilities/total assets

X3 = working capital/total assets

X4 = current liabilities/current assets

X5 = 1 if total liabilities > total assets; 0 if opposite.

X6 = net income/total assets

X7 = cash flow from operations/total liabilities

X8 = 1 if Net Income negative; 0 if opposite.

X9 = (NIt-NIt-1)/(NIt + NIt-1), where NIt are Net Income for new period.

Result from Ohlson model can be described with this criteria.

Zmijewski is a model that can see whether a company is healthy or not. Zmijewski's research sought to create a model, using probit analysis, to differentiate between bankrupt and non-bankrupt companies based on their liquidity ratio, ROA, and leverage (Saha, 2024). Here's a model from Zmijewski.

 $X = -4.3 - 4.5 \times 1 + 5.7 \times 2 - 0.004 \times 3$

X1 = earning after tax/total assets (Return On Assets)

X2 = total debt/total assets (Debt Ratio)

X3 = current assets/current liability (Current Ratio)

Result from Ohlson model can be described with this criteria.

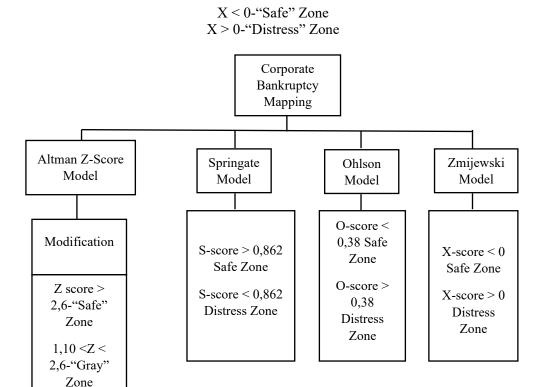


Figure 1. Criteria for 4 Bankruptcy Model

3. Research Methodology

The population under scrutiny in this research encompasses all property companies actively listed on the Indonesia Stock Exchange (IDX). To select a representative sample, the study employs a purposive sampling method, a technique that allows for the deliberate selection of participants based on predefined criteria relevant to the research objectives. Specifically, the criteria for inclusion in the sample mandate that the property company must be officially registered on the BEI (Bursa Efek Indonesia), the Indonesian Stock Exchange, ensuring that the companies are legitimate and actively traded. Furthermore, selected companies must possess and make available the requisite data necessary for conducting the analysis central to this research. This data includes, but is not limited to, metrics such as Current Assets, Current Liabilities, Total Assets, Retained Earnings, Earnings Before Interest and Taxes (EBIT), Outstanding Shares, Today's Stock Price, Market Value of Equity, Working Capital, Sales, Earnings After Tax (EAT), Total Debt, Net Income, Cash Flow From Operations, Gross National Product (GNP) Price Level Index, and Exchange Rate. The exchange rate is used in the calculation to find the GNP Price Level Index in Indonesian Rupiah (IDR). The data is obtained from the company's financial reports.

Once the data is meticulously gathered from the financial reports, it is inputted into the four bankruptcy models. These models then process the data to generate a predictive assessment of each company's financial health. Following this, the results derived from each of the four bankruptcy models are synthesized and presented in a bar chart format, providing a clear and visually accessible summary of the findings. The data utilized in this research is classified as secondary data, sourced directly from the financial reports accessible on the BEI/IDX website. Finally, the insights gleaned from this analysis are presented in the form of a bar chart.

4. Results and Discussion

The research steps are to identify the problem, then carry out sampling which is then continued with collecting financial data using documentation techniques. The data obtained is then entered into the four bankruptcy models, the results of these models are then made into a bar chart.



Figure 2. Research Steps Sources: Researcher (2025)

The figure shows a study procedure that follows a set of clearly defined procedures to analyze possible bankruptcy. The first step is problem identification, which establishes the parameters and goals of the study. Purposive sampling, which selects particular instances according to preset criteria pertinent to the bankruptcy study, is then used for sampling. After sampling, firm financial data is gathered using

the proper documentation methods to guarantee data dependability and integrity. To evaluate financial health and forecast the probability of bankruptcy, the gathered data is further subjected to data analysis utilizing four bankruptcy models. A bar chart is generated to provide a clear and succinct visual representation of the data analysis outcomes. An explanation of the findings, including conclusions and interpretations drawn from the analysis and visualization, brings the process to a close. In order to draw conclusions and make well-informed judgments based on the findings, this phase is essential.

Table 1. Altman Z-Score

	2019	2020	2021	2022	2023
Distress Zone	0	0	1	1	1
Gray Zone	1	1	0	1	1
Safe Zone	14	14	14	13	13

Source: Researcher (2025)

Table 1 is the result of the condition of property companies as seen from the Altman Z-Score model. In 2019 and 2020 there was 1 company in the gray zone and 14 company in the safe zone position, in 2021 there was 1 company in the distress zone position and 14 companies in the safe zone position, in 2022 and 2023 there was 1 company in the distress zone position, 1 company in the gray zone, and 13 companies in the safe zone.

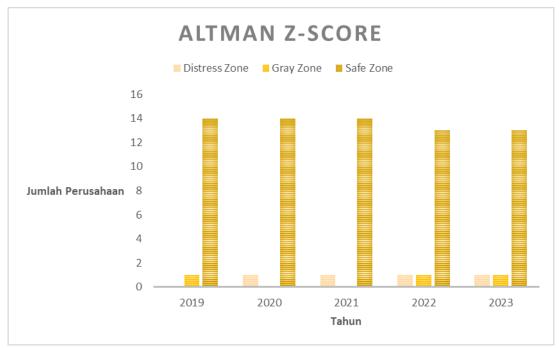


Figure 3. Results of Altman Z-Score Model Sources: Researcher (2025)

The bar chart, titled "Altman Z-Score," illustrates the distribution of companies across different financial health categories from 2019 to 2023. The y-axis, labeled "Jumlah Perusahaan" (Number of Companies), represents the count of companies, while the x-axis, labeled "Tahun" (Year), denotes the years under consideration. The chart divides companies into three zones based on their Altman Z-Score: Distress Zone (represented by a light yellow bar), Gray Zone (represented by a plain yellow bar), and Safe Zone (represented by a yellow bar with lined pattern). These zones indicate the level of financial risk associated with the companies.

Across all the years shown, a clear trend emerges: the number of companies classified within the "Safe Zone" is significantly higher than those in the "Distress Zone" or "Gray Zone." The "Distress Zone" consistently has the lowest number of companies. The "Gray Zone" is also relatively low. The "Safe Zone" seems to fluctuate slightly between the years, but remains the dominant category. This suggests

that the majority of the companies analyzed are financially stable according to the Altman Z-Score during the specified period.

Table 2. Springate

	2019	2020	2021	2022	2023
Distress Zone	10	13	11	10	8
Safe Zone	5	2	4	5	7

Source: Researcher (2025)

Table 2 is the result of the condition of property companies as seen from the Springate model. Between 2019 and 2023, there was a shift in the financial health of the companies. In 2019, 10 companies were in the distress zone and 4 in the safe zone. By 2023, the number of distressed companies had decreased to 8, while the number of safe companies had increased to 7. The intervening years saw the following distribution: 12 distressed and 2 safe in 2020, 10 distressed and 4 safe in 2021, and 9 distressed and 5 safe in 2022.

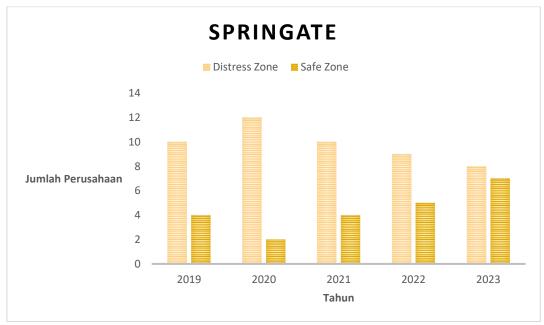


Figure 4. Results of Springate Model Source: Researcher (2025)

The figure, titled "Springate," presents a bar chart comparing the number of companies in a "Distress Zone" versus a "Safe Zone" over a five-year period, from 2019 to 2023. The y-axis, labeled "Jumlah Perusahaan" (Number of Companies), indicates the count of companies, ranging from 0 to 14. The x-axis, labeled "Tahun" (Year), displays the years 2019, 2020, 2021, 2022, and 2023. For each year, there are two bars: one representing the number of companies in the Distress Zone (represented by lighter color) and the other representing the number of companies in the Safe Zone (represented by darker color).

Looking at the trend, the number of companies in the Distress Zone fluctuates over the years. It starts at 10 in 2019, increases to 12 in 2020, drops back to 10 in 2021, decreases to 9 in 2022, and falls to 8 in 2023. Meanwhile, the number of companies in the Safe Zone remains relatively low compared to the Distress Zone. It starts at 4 in 2019, drops to 2 in 2020, goes back to 4 in 2021, increases to 5 in 2022, and rises to 7 in 2023. Overall, the chart suggests that a significant number of companies were facing distress during this period, with the number being consistently higher than those in the safe zone. However, the safe zone increased gradually over the years while the distress zone decreased.

Table 3. Ohlson

	2019	2020	2021	2022	2023
Distress Zone	4	7	6	6	5
Safe Zone	11	8	9	9	10

Source: Researcher (2025)

Table 3 shows the results of property company conditions using the Ohlson model. It can be seen that in 2019 there were 4 companies in the distress zone position and 11 companies in the safe zone position, in 2020 there were 7 companies in the distress zone position and 8 companies in the safe zone position, in 2021 and 2022 there were 6 companies in the distress zone position and 9 companies in the safe zone position, in 2023 there were 5 companies in the distress zone position and 10 companies in the safe zone position.



Figure 5. Result of Ohlson Model Source : Researcher (2025)

The figure is a bar graph titled "Ohlson," comparing the number of companies in a "Distress Zone" versus a "Safe Zone" over the years 2019 to 2023. The y-axis represents "Jumlah Perusahaan" (Number of Companies), and the x-axis represents "Tahun" (Year). In 2019, there were approximately 4 companies in the Distress Zone and 11 companies in the Safe Zone. The number of companies in the Distress Zone increased to about 7 in 2020, while the number in the Safe Zone decreased to around 8. In 2021, the Distress Zone had about 6 companies, and the Safe Zone increased slightly to around 9. The year 2022 shows roughly 6 companies in the Distress Zone and about 9 in the Safe Zone, maintaining a similar level to the previous year. By 2023, the number of companies in the Distress Zone decreased to approximately 5, while the Safe Zone saw an increase to about 10 companies.

Overall, the graph indicates that the number of companies in the "Safe Zone" is consistently higher than those in the "Distress Zone" for all years shown. There are fluctuations in both zones, with the "Distress Zone" showing a slight increase initially but decreasing towards the end of the period, and the "Safe Zone" showing some variability but generally maintaining a higher count of companies.

Table 4. Zmijewski

	2019	2020	2021	2022	2023
Distress Zone	0	1	0	0	0
Safe Zone	15	14	15	15	15

Source: Researcher (2025)

Table 4 is the result of the condition of property companies as seen from the Zmijewski model. It can be seen that in 2019 there were 15 companies in the safe zone position, in 2020 there was 1 company in the distress zone position and 14 companies in the safe zone position, in 2021-2023 there were 15 companies in the safe zone position.



Figure 6. Result of Zmijewski Model Source (2025)

The figure, titled "Zmijewski," is a bar chart displaying the financial health categorization of companies over the years 2019 to 2023. The Y-axis, labeled "Jumlah Perusahaan" (Number of Companies), indicates the count of companies. The X-axis, labeled "Tahun" (Year), represents the time frame. The chart uses the Zmijewski model, a financial distress prediction model, to classify companies into two zones: "Safe Zone" (represented by solid gold bars) and "Distress Zone" (represented by lighter gold bars).

From 2019 to 2023, a significant number of companies consistently fall within the "Safe Zone," with the number of companies ranging from 14 to 15 each year. This indicates that, according to the Zmijewski model, a large majority of companies in the sample are financially stable and not at immediate risk of distress during this period. Only in 2020 there is one company in distress zone and no companies in distress zone in the other years. Overall, the figure provides a high-level overview of the financial stability of companies analyzed using the Zmijewski model, suggesting a generally healthy economic environment for the majority of businesses considered, with only a few exceptions in specific years. On this research, there are 4 company or about 27% of company on this research that is in safe zone in all model. This imply that 4 company is ready to do expansion to IKN.

5. Conclusion

This study shows that in 2019 for Altman Model there are 0 company in distress zone, 1 company in gray zone, and 14 company in safe zone. For Springate Model there are 10 company in distress zone and 5 company on safe zone. For Ohlson Model there are 4 company in distress zone and 11 company on safe zone. For Zmijewski Model there are 0 company in distress zone and 15 company on safe zone. At 2020 for Altman Model, there are 0 company in distress zone, 1 company in gray zone, and 14 company in safe zone. For Springate Model there are 13 company in distress zone and 2 company in safe zone. For Ohlson Model there are 7 company in distress zone and 8 company in safe zone. For Zmijewski model there are 1 company in distress zone and 14 company in safe zone. At 2021 for Altman Model, there are 1 company in distress zone, 0 company in gray zone, and 14 company in safe zone.

For Springate Model there are 11 company in distress zone and 4 company on safe zone. For Ohlson Model there are 6 company in distress zone and 9 company in safe zone. For Zmijewski there are 0 company in distress zone and 15 company on safe zone. At 2022 for Altman Model there are 1 company in distress zone, 1 company in gray zone, and 13 company in safe zone. For Springate Model there are 10 company in distress zone and 5 company in safe zone. For Ohlson Model there are 6 company in distress zone and 9 company in safe zone. For Zmijewski Model there are 0 company in distress zone and 15 company in safe zone. At 2023 for Altman Model there are 0 company in distress zone, 1 company in gray zone, and 14 company in safe zone. For Springate model there are 8 company in distress zone and 7 company in safe zone. For Zmijewski model there are 0 company in distress zone and 15 company in safe zone.

Limitation and Further Studies

This research, while providing valuable insights into the financial health of property companies, possesses certain limitations that should be acknowledged. A primary constraint lies in the scope of the study, which focuses exclusively on companies operating within the property sector. The financial dynamics and risk factors inherent to property businesses can differ significantly from those in other industries. Therefore, the findings and conclusions drawn from this research may not be directly generalizable to companies in different sectors, such as manufacturing, technology, or services. The unique characteristics of the property market, including its cyclical nature, sensitivity to interest rate fluctuations, and reliance on macroeconomic conditions, necessitate careful consideration when interpreting the results.

Furthermore, the current study primarily serves as a mapping exercise, identifying the financial health status of property companies based on the application of four bankruptcy prediction models. While this mapping provides a useful overview of the landscape, it does not delve into an in-depth assessment of the predictive accuracy of each individual model. The research does not empirically evaluate how well each model performs in terms of correctly classifying companies that subsequently experience financial distress versus those that remain solvent. Without such an accuracy assessment, it is difficult to determine which model is the most reliable and effective for predicting bankruptcy within the specific context of the property industry.

To address these limitations and further advance our understanding of financial distress prediction, future research endeavors could explore several promising avenues. One compelling direction would be to conduct a rigorous evaluation of the predictive accuracy of the four bankruptcy models employed in this study. This could involve utilizing historical financial data to compare the models' classification accuracy, error rates, and other relevant performance metrics. Such an analysis would provide valuable insights into the strengths and weaknesses of each model, enabling practitioners and researchers to make more informed decisions about which models to use for bankruptcy prediction purposes.

Another potential avenue for future research would be to extend the scope of the analysis to include companies from other industries beyond the property sector. This would allow for a comparative assessment of financial distress patterns across different industries, potentially revealing industry-specific risk factors and vulnerabilities. By examining a more diverse sample of companies, researchers could develop more generalizable and robust bankruptcy prediction models that are applicable across a wider range of economic contexts. Additionally, focusing on different types of companies can provide a broader understanding of financial stability and distress signals in various sectors. This approach would enhance the applicability and relevance of future research in the field of financial distress prediction.

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References

- Agbo, E., & Egbunike, C. (2024). CEO Political Connection, Shareholding and Financial Distress of Deposit Money Banks in Nigeria. *International Journal of Financial, Accounting, and Management*, 6(1), 135–149. https://doi.org/10.35912/ijfam.v6i1.1649
- Alexander, H. B. (2024, May 25). Buka Peluang Bisnis Properti, IKN Berpotensi Jadi "New Smart Hub." *Ikn.Kompas.Com*.
- Amelia, R. (2023). Sentiment Analysis of Government Policy in Relocating the Republic of Indonesia's Capital City. *Journal of Public Administration and Government*, 5(2), 177–187. https://doi.org/10.22487/jpag.v5i2.1029
- Dewi, S. (2024). Prediction of financial distress in transportation and logistics companies before, during and after the Covid-19 pandemic listed on the Indonesia Stock Exchange. *Journal of Multidisciplinary Academic and Practice Studies*, 2(3), 687–707. https://doi.org/10.35912/jomaps.v2i3.2389
- Hanafi, M. M., & Halim, A. (2016). Analisis Laporan Keuangan (5th ed.). UPP STIM YKPN.
- Hasibuan, R. R. A., & Aisa, S. (2020). DAMPAK DAN RESIKO PERPINDAHAN IBU KOTA TERHADAP EKONOMI DI INDONESIA. *AT-TAWASSUTH: Jurnal Ekonomi Islam*, *5*(1), 183. https://doi.org/10.30829/ajei.v5i1.7947
- Ikwuo, A. K., Nwite, I. M., Nworie, G. O., & Nworie, F. N. (2025). Shareholder value diminution through long-term debts: Evidence from the Nigerian oil industry. *Annals of Management and Organization Research*, 6(3), 271–285. https://doi.org/10.35912/amor.v6i3.2628
- Laksmiwati, M., & Priyanto, S. (2020). Peran financial distress Altman memediasi kinerja keuangan terhadap harga saham pada BUMN di BEI. *Jurnal Akuntansi, Keuangan, Dan Manajemen*, 2(1), 27–40. https://doi.org/10.35912/jakman.v2i1.125
- Lewier, I. G., Usmany, P., & Loupatty, L. G. (2024). The Effect of Financial Distress, Audit Opinion and Audit Fee on Auditor Switching (Empirical Study on Mining Companies Listed on the Indonesia Stock Exchange). *Jurnal Ilmiah Akuntansi Kesatuan*, 12(5), 759–770. https://doi.org/10.37641/jiakes.v12i5.2918
- Manan, M. A., & Hasnawati, S. (2022). Pengaruh Good Corporate Governance terhadap Financial Distress yang di Kontrol oleh Ukuran Perusahaan pada Perusahaan Industri Sektor Manufaktur di Indonesia. *Jurnal Akuntansi, Keuangan, Dan Manajemen*, 3(4), 279–292. https://doi.org/10.35912/jakman.v3i4.1197
- Martini, R., Aulia, D., Nurhasanah, N., & Sari, K. R. (2021). Penerapan Metode Altman (Z-Score) untuk Memprediksi Risiko Kebangkrutan. *Jurnal Penelitian Ekonomi Dan Akuntansi*, 6(3), 255–262. https://doi.org/10.30736/jpensi.v6i3.806
- Mihelle, M., & Lukman, H. (2024). The Influence of Profitability, Liquidity, and Leverage on Financial Distress in General Insurance Companies during the Covid 19 Pandemic. *International Journal of Application on Economics and Business*, 2(3), 408–416. https://doi.org/10.24912/ijaeb.v2i3.406-416

- Moradi, A. M., & Beigi, N. A. K. (2020). Strategic management of organizational resources using predicting the organization's bankruptcy level: New approach using Monte Carlo Simulation. *Annals of Management and Organization Research*, 2(2), 113–127. https://doi.org/10.35912/amor.v2i2.615
- Najib, A. S., & Cahyaningdyah, D. (2020). Analysis of The Bankruptcy of Companies with Altman Model and Ohlson Model. *Management Analysis Journal*, 9(3), 243–251. https://doi.org/10.15294/maj.v9i3.37797
- Nurlaila, R., Marsiwi, D., & Ulfah, I. F. (2021). Analisis Kebangkrutan dengan Menggunakan Metode Springate Pada Perusahaan Asuransi Jiwa di Indonesia Tahun 2016-2018. *ASSET: Jurnal Manajemen Dan Bisnis*, 4(1). https://doi.org/10.24269/asset.v4i1.3835
- Nusyirwan, N., Kusdiana, Y., Tinaria, L., Zubir, Z., & Masril, M. (2023). Model Altman's Z-Score dan Springate Memprediksi Financial Distress (Studi Kasus Perusahaan Sub Migas yang Tercatat di BEI Tahun 2017 2020). *Jurnal Akuntansi, Manajemen, Bisnis Dan Teknologi (AMBITEK)*, 3(1), 127–135. https://doi.org/10.56870/ambitek.v3i1.78
- Putri, T. E., & Putri, S. A. (2024). Determinant of Financial Distress in Construction Sub-Sector Companies in Indonesia and Malaysia. *Proceeding of International Conference on Accounting and Finance*, 2, 319–334.
- Restianti, T., & Agustina, L. (2018). The Effect of Financial Ratios on Financial Distress Conditions in Sub Industrial Sector Company. *Accounting Analysis Journal*, 7(1), 25–33. https://doi.org/10.15294/aaj.v7i1.18996
- Saha, P. (2024). Comprehensive Analysis of Altman's Z Score, Zmijewski X Score, Springate S-Score and Grover G-Score Model for Predicting Financial Health of Listed Non-Bank Financial Institutions (NBFIs) of Bangladesh. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4957004
- Salim, S. N., & Dillak, V. J. (2021). Pengaruh Ukuran Perusahaan, Biaya Agensi Manajerial, Struktur Modal dan Gender Diversity terhadap Financial Distress. *Jurnal Ilmiah Manajemen Ekonomi Dan Akuntansi*, 5(3), 182–198. https://doi.org/10.31955/mea.v5i3.1416
- Saraswati, M. K., & Adi, E. A. W. (2022). Pemindahan Ibu Kota Negara Ke Provinsi Kalimantan Timur Berdasarkan Analisis Swot. *Jurnal Ilmu Sosial Dan Pendidikan (JISIP)*, 6(2), 4042–4052.
- Seno Pamungkas, K. (2023). Financial Distress Analysis Using the Ohlson Model in Indonesian State Owned Enterprises. *Journal of Accounting and Finance Management*, *3*(6), 272–381. https://doi.org/10.38035/jafm.v3i6.176
- Sumarni, I. (2022). Analisis Financial Distress Perusahaan di Indonesia dimasa Pandemic Covid-19. *PubBis : Jurnal Penelitian Dan Pemikiran Administrasi Publik Dan Administrasi Bisnis*, 6(1), 86–101. https://doi.org/10.35722/pubbis.v6i1.584
- Sunaryo, S. (2015). Evaluasi Tingkat Keakuratan antara Model Springate dengan Model Altman dalam Memprediksi Delisting Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Journal of Business Strategy and Execution*, 7(2), 155–176.
- Taufiq, M. (2020). Pemindahan Ibu Kota dan Potensi Konektivitas Pemerataan Ekonomi. *Jurnal Vokasi Indonesia*, 8(1), 27–39.
- Tawil, Y. P., & Rahmarini, G. M. (2022). The Fate of Jakarta Special Autonomy After The Movement of The Capital City of The United State of The Republic of Indonesia. *Journal of Public Administration and Government*, 4(2), 140–149. https://doi.org/10.22487/jpag.v4i2.475