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Analysis of Financial Distress Prediction at PT Kharisma Dua Putri for 2020–2024

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ABSTRACT: This study aims to analyze the prediction of financial distress at PT Kharisma Dua Putri (KDP) for the 2020–2024 period using multiple bankruptcy prediction models, namely Altman Z-Score, Springate, Grover, Zmijewski, Taffler. The purpose of this research is to evaluate the company's financial condition by comparing the predictive consistency among the models and identifying indicators of potential distress. A quantitative descriptive approach is employed using secondary data obtained from audited financial statements covering 2020 to 2024. The results of each model are compared to assess the firm's financial health and risk of insolvency. The findings reveal variations in prediction outcomes, with several models indicating early signs of financial vulnerability, particularly during periods of declining profitability and liquidity. Overall, PT KDP experienced fluctuating financial performance that approached distress thresholds in certain years. The study highlights the importance of a multi-model analytical approach to enhance the accuracy of financial distress assessment and to provide early warning signals for managerial decision-making.

KEYWORDS: Altman, Financial Distress Prediction, Grover, Springate, Taffler, Zmijewski

1. INTRODUCTION

Financial distress prediction is a central topic in corporate finance, as economic volatility and competitive pressures affect firms' ability to maintain financial stability[1]. Early identification of distress signals is crucial for preventing bankruptcy and supporting effective managerial decision-making[2]. In family-owned businesses, governance structures are often informal, with decision-making concentrated among core family members[3]. This informality can limit systematic financial monitoring, causing early warning signs of distress to be overlooked and delaying corrective actions[4].

Family-owned enterprises dominate Indonesia's private sector [5], yet empirical evidence on financial distress in privately held family firms, especially in the construction-related service sector, remains limited[6]. Ownership concentration and limited use of analytical tools may allow fluctuations in liquidity, profitability, or leverage to go unnoticed until they escalate into serious financial problems [7]. This gap highlights the need for more comprehensive and multidimensional approaches to assess the risk of financial distress in such firms[8].

PT Kharisma Dua Putri is a family-owned enterprise engaged in the construction and electrical services industry. The company is headquartered in Surabaya, Indonesia, and was established in 2012. Since its founding, PT Kharisma Dua Putri has provided integrated solutions in electrical installation, lighting infrastructure, and related engineering services for both public and private sector projects.

As a privately held company, PT Kharisma Dua Putri emphasizes professionalism, reliability, and compliance with technical and safety standards in every aspect of its operations. The company's commitment to quality and efficiency supports its mission to contribute to sustainable infrastructure development and long-term client satisfaction.

PT Kharisma Dua Putri (PT KDP), a family-owned company in electrical construction and lighting services, provides a suitable case for addressing this gap. Between 2020 and 2024, its financial statements reveal notable variations in assets, equity, profitability, and emerging liabilities (Table 1), reflecting structural adjustments driven by both expansion efforts and increasing operational pressures. This study applies six established financial distress prediction models: Altman Z-Score, Fisher, Grover, Springate, Taffler, and Zmijewski, incorporating ratios of profitability, liquidity, solvency, leverage, and operational efficiency[1]. Comparing outcomes across these models offers a multidimensional evaluation of the firm's financial health and provides insights for both theory and practice in predicting and managing financial distress among family-owned enterprises in Indonesia.

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Table 1. Summary of PT KDP's Financial Performance 2020–2024 (in thousand IDR)

Year	Description					
	Total Assets	Total Liablities	Total Equity	Revenue Business	Operating Expenses	Net Profit Before tax
2020	1,187,104	-	1,187,104	3,444,393	637,959	351,950
2021	1,749,372	-	1,749,372	3,357,361	365,722	637,087
2022	1,958,122	-	1,958,122	2,719,401	403,570	208,750
2023	2,368,620	232	2,368,387	3,744,670	624,402	690,445
2024	13,225,734	10,288,602	2,937,132	1,887,076	827,162	1,059,913

Source: Data processed by researchers, 2025

2. LITERATURE REVIEW

2.1 Financial Statement

Financial statements are the final result of recording and summarizing a company's transactions. They serve as the main tool to evaluate a company's financial position and performance. The primary objective of financial statements is to provide relevant and reliable information that supports users in making sound economic decisions [9]. These statements describe a company's financial position at a specific point in time through the balance sheet and its performance over a certain period through the income statement[10]. In addition to reporting purposes, financial statements are important for analyzing profitability, liquidity, leverage, and solvency. These financial aspects help identify potential warning signs of financial distress.

2.2 Financial Distress

Financial distress is a condition in which a company faces difficulty meeting its financial obligations due to a decline in performance or ineffective management. It often represents an early stage before bankruptcy occurs. Detecting financial distress at an early stage allows management, auditors, and investors to take preventive actions and reduce potential risks[11]. highlighted the importance of recognizing early warning signals to maintain business continuity. Since then, several models have been developed to predict financial distress, including those by Altman, Springate, Grover, Taffler, Foster, and Zmijewski. Each model uses different financial ratios to evaluate profitability, liquidity, leverage, and solvency, providing varied perspectives on a company's financial stability[2].

2.3 Previous Studies

Financial distress prediction is a critical tool for assessing a firm's ability to maintain operational continuity, enabling auditors to form more reliable going-concern judgments and allowing firms to identify early warning signals that support timely corrective actions to mitigate bankruptcy risk. Weak managerial practices can exacerbate performance decline and contribute to broader organizational challenges, including financial instability. financial distress denotes a phase of deteriorating financial health that precedes insolvency or liquidation, typically manifested in a firm's inability or insufficient capacity to meet its financial obligations on schedule [12].

3. RESEARCH METHOD

3.1 Methods

This study employs a quantitative descriptive approach to analyze the potential for financial distress at PT Kharisma Dua Putri (KDP), a privately held family company operating in the construction and electrical services sector. The objective is to evaluate the firm's financial condition and identify early indicators of distress during the 2020–2024 period. The analysis is based on audited internal financial statements, obtained with management approval to ensure data reliability and validity.

A multi-model analytical approach is applied using six bankruptcy prediction models: Altman Z-Score, Springate, Grover, Zmijewski and Taffler. These models assess key financial ratios such as liquidity, profitability, solvency, and leverage. The results of each mo del are compared and analyzed descriptively to evaluate prediction consistency and detect potential performance decline. This multi-model approach enhances the accuracy of financial risk assessment and provides early warning signals to support strategic managerial decision-making.

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3.1.1 Method Altman

The Altman Z-Score model, developed by Edward I. Altman, is one of the earliest and most influential models for predicting corporate bankruptcy[13]. Using Multiple Discriminant Analysis (MDA) on financial ratios from 66 manufacturing firms (33 bankrupt and 33 non-bankrupt), Altman identified key ratios that effectively distinguish financially distressed companies from healthy ones[1]. The resulting model produced the following equation:

$$\mathbf{Z = 1{,}2\ X_1 + 1{,}4\ X_2 + 3{,}3\ X_3 + 0.6\ X_4 + 1.0\ X_5}$$

Description:

X_1 (Liquidity Ratio) = Working Capital / Total Assets
X_2 (Profitability Ratio) = Retained Earnings / Total Assets
X_3 (Operating Efficiency) = Earning Before Interest and Tax / Total Assets
X_4 (Leverage Ratio) = Market Value Equity / Total Liabilities

X_5 (Asset Turnover Ratio) = Sales / Total AssetsThe Z-Score value serves as an indicator of financial distress, where a higher score indicates better financial health. The firms with a Z-Score below 1.81 are considered in the distress zone, scores between 1.81–2.99 fall in the grey zone, and scores above 2.99 are in the safe zone. This model has become a foundational reference in financial distress analysis and has been widely applied, modified, and validated in subsequent studies[1].

3.1.2 Method Grover

The Grover model was developed by Jeffrey S. Grover (2001) as an enhancement of the Altman Z-Score model. By revisiting Altman's 1968 sample and incorporating 13 additional financial ratios, Grover refined the discriminant function to improve the accuracy of bankruptcy prediction. The model was constructed using data from 70 firms, consisting of 35 bankrupt and 35 non-bankrupt companies, covering the period from 1982 to 1996[1]. The resulting model produced the following equation:

$$\mathbf{G\text{-}Score = 1{,}65\ X_1 + 3{,}404\ X_2 + 0{,}016\ X_3 + 0.057}$$

Description:

X_1 (Liquidity Ratio) = Working Capital / Total Assets
X_2 (Operating Efficiency) = Earning Before Interest and Tax / Total Assets
X_3 (Return On Assets) = Net Income/ Total Assets

A Grover score (G) below –0.02 indicates financial distress, values between –0.02 and 0.01 represent the grey zone, and scores above 0.01 indicate a healthy financial condition [1].

3.1.3 Method Springate

The Springate model was developed by Gordon L. V. Springate (1978) using Multiple Discriminant Analysis (MDA), following the analytical approach introduced by Altman and Edward I (1968). The model was designed to predict corporate bankruptcy using financial ratios derived from firms' financial statements. In developing the model, Springate examined 40 manufacturing companies, consisting of 20 bankrupt and 20 non-bankrupt firms, to identify the financial ratios that most effectively differentiated the two groups[1]. The resulting discriminant function is as follows:

$$\mathbf{S\text{ - }Score = 1{,}03\ X_1 + 3{,}07\ X_2 + 0{,}66\ X_3 + 0{,}4\ X_4}$$

Description:

X_1 (Liquidity Ratio) = Working Capital / Total Assets
X_2 (Operating Efficiency) = Earning Before Interest and Tax / Total Assets
X_3 (Return on Liabilities (ROL)) = Earning Before Interest and Tax / Current Liabilities
X_4 (Total Asset Turnover) = Sales / Total Assets

A company is predicted to be in financial distress if the Springate score (S) is below 0.862, while scores above 0.862 indicate a healthy financial condition [1].

3.1.4 Method Taffler

The Taffler model was developed by Richard J. Taffler (1977) as an alternative bankruptcy prediction model using Multiple Discriminant Analysis (MDA). Drawing on financial data from 80 publicly listed UK industrial firms, comprising 46 failed and 34 non-failed companies, Taffler identified a set of financial ratios that effectively differentiate between solvent and insolvent firms[1].The resulting discriminant function is as follows:

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$$T = 0{,}53\ X_1 + 0{,}13\ X_2 + 0{,}18\ X_3 + 0{,}16\ X_4$$

Description:

X_1 (EBIT to Current Debt Ratio)	= Earning Before Interest and Tax / Current Debt
X_2 (Current Ratio)	= Current Assets / Current Debt
X_3 (Current Debt to Total Assets Ratio)	= Current Debt / Total Assets
X_4 (Total Asset Turnover)	= Sales / Total Assets

A Taffler score (Z) below 0.2 indicates a high probability of financial distress, while a score above 0.3 suggests financial stability[1].

3.1.5 Method Zmijewski

The Zmijewski model was developed by Mark E. Zmijewski (1984) to predict corporate financial distress using a probit regression approach, in contrast to earlier models that relied on discriminant analysis. The model was formulated based on financial data from 40 bankrupt and 800 non-bankrupt firms during the 1972–1978 period, allowing the identification of variables significantly associated with bankruptcy probability. The resulting model is expressed as follows:

$$X = -4{,}3 - 4{,}5\ X_1 + 5{,}7\ X_2 + 0{,}004\ X_3$$

Description:

X_1 (Return On Asset)	= Net Income / Total Assets
X_2 (Debt Ratio)	= Total Debt / Total Assets
X_3 (Current Ratio)	= Current Assets / Current Liabilities

A higher Zmijewski score (X) indicates a greater probability of financial distress, while lower values signify a healthier financial condition. The model applies a cutoff value where firms with X<0 are classified as financially healthy, and firms with X>0 are categorized as financially distressed (Zmijewski, 1984). This threshold allows the model to effectively distinguish between solvent and insolvent companies based on profitability, leverage, and liquidity indicators derived from financial statements[1].

4. RESULT AND DISCUSSION

4.1 Result

Table 2. Basis for Financial Distress Score Calculation

Description	Years				
	2020	2021	2022	2023	2024
Current Asset	949.402	1.559.177	1.811.685	693.040	1.859.708
Current Debt	-	-	-	-	3.884.240
Current Liabilities	-	-	-	-	10.178.602
EBIT	351.951	637.087	208.750	690.445	1.059.913
Market Value Equity (Total Equity)	1.187.104	1.749.372	1.958.123	2.368.388	2.937.133
Net Income	271.026	562.268	208.750	619.015	818.745
Retained Earning	887.104	1.449.372	1.658.123	2.277.138	2.887.133
Sales	3.444.393	3.357.362	2.719.401	3.744.670	1.887.076
Total Asset	1.187.104	1.749.372	1.958.123	2.368.621	13.225.735
Total Debt	-	-	-	-	3.884.240
Total Liabilities	-	-	-	233	10.288.602
Working Capital	949.402	1.559.177	1.811.685	693.040	- 8.318.894

Source: Data processed by researchers, 2025

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Table 2 summarizes the company's key financial data from 2020 to 2024, serving as the basis for calculating financial distress scores using the Altman Z-Score, Grover, Springate, Taffler, and Zmijewski models. The data reveal noticeable fluctuations across liquidity, profitability, and leverage indicators, reflecting the company's dynamic financial performance during the observed period.

Working capital showed a downward trend, indicating potential liquidity pressure, while the steady increase in liabilities suggests a higher leverage position over time. Despite moderate improvements in profitability, as reflected by rising earnings and net income, the weakening liquidity position and growing debt ratio may signal an elevated risk of financial distress. These patterns provide important inputs for further analysis using the selected models to assess the company's stability and potential going-concern issues.

4.2 Discussion

4.2.1 Altman Method

Table 3. Altman Method Results (2020–2024)

Description	Years				
	2020	**2021**	**2022**	**2023**	**2024**
X1	0,800	0,891	0,925	0,293	-0,629
X2	0,747	0,829	0,847	0,961	0,218
X3	0,296	0,364	0,107	0,291	0,080
X4	-	-	-	10.169,250	0,285
X5	2,902	1,919	1,389	1,581	0,143
Z-Score	**5,886**	**5,350**	**4,036**	**6.105,790**	**0,129**
Potential	**Healthy**	**Healthy**	**Healthy**	**Healthy**	**Distress**

Source: Data processed by researchers, 2025

The Altman Z-Score results show that PT Kharisma Dua Putri maintained a strong financial position from 2020 to 2023 before facing distress in 2024. In 2020, a Z-Score of 5.886 indicated a healthy condition supported by strong liquidity and retained earnings, reflecting effective internal capital utilization. The company remained financially sound in 2021, with a score of 5.350 and improved profitability, signaling consistent operational efficiency and low leverage.

In 2022, the score slightly decreased to 4.036, mainly due to lower profitability, though liquidity and equity positions remained stable. This kept the company within the safe zone. A notable rebound occurred in 2023 when the score rose to 6.105, reflecting regained profitability and investor confidence. However, in 2024, the score dropped sharply to 0.129, signaling clear financial distress caused by negative liquidity and profitability pressures. Despite this, the downturn appears to stem more from long-term asset investment than operational inefficiency. Overall, the Altman model effectively illustrates both resilience and emerging distress, serving as a reliable baseline reference for comparative evaluation.

4.2.2 Grover Method

Table 4. Grover Method Results (2020–2024)

Description	Years				
	2020	**2021**	**2022**	**2023**	**2024**
X1	0,800	0,891	0,925	0,293	-0,629
X2	0,296	0,364	0,107	0,291	0,080
X3	0,228	0,321	0,107	0,261	0,062
G-Score	**2,389**	**2,772**	**1,948**	**1,536**	**-0,707**
Potential	**Healthy**	**Healthy**	**Healthy**	**Healthy**	**Distress**

Source: Data processed by researchers, 2025

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Compared to the Altman Z-Score, the Grover model produced slightly lower values throughout 2020–2023, suggesting a more conservative perspective on financial stability. From 2020 to 2023, Grover's results consistently indicated a "healthy" condition, aligning with Altman's classification but showing greater sensitivity to fluctuations in profitability and liquidity.

In 2024, both models signaled financial distress; however, the Grover score demonstrated a steeper decline, indicating heightened responsiveness to liquidity deterioration. This pattern suggests that while Grover validates Altman's findings, it provides earlier or sharper detection of financial risk under declining earnings conditions. Therefore, Grover can be viewed as a more sensitive variant of the Altman framework, particularly effective for detecting short-term financial strain.

4.2.3 Springate Method

Table 5. Springate Method Results (2020–2024)

Description	Years				
	2020	**2021**	**2022**	**2023**	**2024**
X1	0,800	0,891	0,925	0,293	-0,629
X2	0,296	0,364	0,107	0,291	0,080
X3	-	-	-	2.964,594	0,103
X4	2,902	1,919	1,389	1,581	0,143
S-Score	**2,895**	**2,804**	**1,836**	**1.958,461**	**-0,277**
Potential	**Healthy**	**Healthy**	**Healthy**	**Healthy**	**Distress**

Source: Data processed by researchers, 2025

The Springate model results closely aligned with those of Altman and Grover during 2020–2023, maintaining a financially sound classification. However, it demonstrated stronger fluctuations in score magnitude, reflecting its higher sensitivity to changes in working capital and liquidity.

While both Altman and Grover continued to classify the company as healthy until 2023, Springate's results began to show early warning tendencies in late 2023, emphasizing potential short-term liquidity pressures. In 2024, the model's sharp decline confirmed the distress condition, matching the pattern observed in Altman and Grover but with more pronounced deviation. This indicates that the Springate model, though directionally consistent, tends to react more aggressively to liquidity shocks, making it particularly suitable for entities with volatile current asset structures.

4.2.4 Taffler Method

Table 6. Taffler Method Results (2020–2024)

Description	Years				
	2020	**2021**	**2022**	**2023**	**2024**
X1	-	-	-	-	0,104
X2	-	-	-	-	0,382
X3	-	-	-	-	0,294
X4	2,902	1,919	1,389	1,581	0,143
Z-Score	**0,464**	**0,307**	**0,222**	**0,253**	**0,180**
Potential	**Healthy**	**Healthy**	**Grey Area**	**Grey Area**	**Grey Area**

Source: Data processed by researchers, 2025

The Taffler model provides a more conservative interpretation compared to the previous three models. While the Altman, Grover, and Springate models classified the firm as financially healthy until 2023, the Taffler model began signaling caution as early as 2022 by placing the company in a "grey area." This indicates that Taffler's formulation, which places greater emphasis on profitability and leverage ratios, is capable of detecting potential financial imbalances earlier, even when overall performance appears stable.

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By 2024, the Taffler score clearly signaled financial distress, aligning with the findings of the other models but offering earlier recognition of emerging financial strain. This demonstrates the model's usefulness as an early warning tool for anticipating solvency issues before they become critical. However, its conservative approach may sometimes overstate financial risk during relatively stable periods, suggesting that its interpretation should be complemented by models emphasizing liquidity and equity performance.

4.2.5 Zmijewski Method

Table 7. Zmijewski Method Results (2020–2024)

Description	Years				
	2020	**2021**	**2022**	**2023**	**2024**
X1	0,228	0,321	0,107	0,261	0,062
X2	-	-	-	-	0,294
X3	-	-	-	-	0,183
X-Score	**-5,327**	**-5,746**	**-4,780**	**-5,476**	**-2,904**
Potential	**Healthy**	**Healthy**	**Healthy**	**Healthy**	**Healthy**

Source: Data processed by researchers, 2025

The Zmijewski model yielded the most stable and less volatile outcomes across all five years. Unlike other models, it consistently classified the company as financially healthy throughout 2020–2024, even during the 2024 downturn. This stability stems from its design, which emphasizes long-term solvency and profitability rather than short-term liquidity.

When compared with Altman, Grover, Springate, and Taffler, the Zmijewski model appears less sensitive to temporary earnings or liquidity shocks. While this limits its ability to detect imminent distress, it enhances its reliability for assessing overall long-term financial sustainability. Consequently, Zmijewski serves as a complementary model, providing a macro-level solvency view that balances the short-term volatility observed in the other four models.

4.2.6 Summary of Comparative Model Results

Table 8. Results of Potential Financial Distress Analysis

Years	Altman (A-Score)		Grover (G-Score)		Springate (S-Score)		Taffler (T-Score)		Zmijewski (X-Score)	
2020	5,89	Healthy	2,39	Healthy	2,90	Healthy	0,46	Healthy	-5,33	Healthy
2021	5,35	Healthy	2,77	Healthy	2,80	Healthy	0,31	Healthy	-5,75	Healthy
2022	4,04	Healthy	1,95	Healthy	1,85	Healthy	0,22	Grey	-4,78	Healthy
2023	6.105,79	Healthy	1,54	Healthy	1.958,46	Healthy	0,25	Grey	-5,48	Healthy
2024	0,13	Distress	-0,71	Distress	-0,28	Distress	0,18	Grey	-2,90	Healthy

Source: Data processed by researchers, 2025

Table 8 presents the comparative results of five financial distress prediction models applied to PT Garuda Indonesia over the 2020–2024 period. Overall, the findings show that the company maintained a consistently healthy financial position from 2020 to 2023, with all models (Altman, Grover, Springate, Taffler, and Zmijewski) classifying these years within the safe zone. This stability reflects the company's strong liquidity, profitability, and effective capital structure management during the early observation period. However, slight variations began to appear in 2022 and 2023, when the Taffler model categorized the firm in the grey area, suggesting an early warning of potential liquidity concerns that were not yet captured by other models.

In 2024, a significant divergence among the models emerged. The Altman, Grover, and Springate models simultaneously detected a shift toward financial distress, as indicated by their markedly low scores. This decline was driven primarily by a sharp fall in liquidity and profitability, implying short-term financial pressure and reduced operational efficiency. Meanwhile, the Taffler model remained in the grey area, signaling uncertainty rather than immediate distress, and the Zmijewski model continued to classify the company as healthy. This inconsistency illustrates fundamental differences in model construction. Altman, Grover, and Springate

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emphasize short-term liquidity and earnings performance, while Taffler and Zmijewski rely more on solvency and long-term financial stability.

Taken together, the comparative analysis reveals that while all models are effective in capturing overall financial health, their sensitivity levels vary depending on the underlying indicators. The Altman and Grover models appear more responsive to sudden shifts in liquidity and profitability, making them effective for early distress detection. Springate demonstrates a similar pattern but applies a more conservative threshold, providing a balanced and cautious interpretation of financial condition. In contrast, the Taffler and Zmijewski models tend to smooth short-term fluctuations and focus more on long-term resilience. These findings suggest that combining multiple models provides a more comprehensive understanding of financial stability, where liquidity-based models can signal early risks and solvency-based models can validate the company's long-term financial soundness.

5. CONCLUSION

This study analyzed the financial distress prediction of PT Kharisma Dwi Perkasa for the 2020–2024 period using five models: Altman Z-Score, Grover, Springate, Taffler, and Zmijewski. The results consistently showed that the company maintained a healthy financial position between 2020 and 2023, before indications of distress emerged in 2024. The Altman, Grover, and Springate models simultaneously detected a decline in liquidity and profitability, confirming short-term financial pressure. Meanwhile, the Taffler model showed early warning signs through its grey-area classification, and the Zmijewski model remained stable, reflecting the firm's long-term solvency strength.

Overall, the findings indicate that each model captures different dimensions of financial performance. Liquidity-based models such as Altman, Grover, and Springate are more effective for detecting early financial stress, while solvency-oriented models like Taffler and Zmijewski provide a broader view of long-term financial sustainability. The combination of both model types offers a more comprehensive and reliable assessment of financial stability for medium-sized, family-owned enterprises such as PT Kharisma Dwi Perkasa.

For future research, it is recommended to expand the analysis by applying the same models to a larger sample of firms within similar industries to enhance comparative validity. Incorporating macroeconomic indicators or using advanced prediction methods, such as machine learning or panel data approaches, may also improve the accuracy and robustness of financial distress assessments in dynamic business environments.

REFERENCES

1. Marsenne M, Ismail T, Taqi M, Hanifah IA. Financial distress predictions with Altman, Springate, Zmijewski, Taffler and Grover models. *Decision Science Letters*. 2024;13:181-190. doi:10.5267/dsl.2023.10.002
2. Safira Hasanah F, Putri Hasanah A, Budianto E. International Journal of Business, Economics and Social Development Analysis of Financial Distress Prediction at PT Garuda Indonesia Tbk for 2020-2023 Using the Grover, Taffler, and Springate. 2025;6(2):319-329.
3. Suseno BD. *SUKSESI PERUSAHAAN KELUARGA BERKELANJUTAN*.; 2022. https://www.researchgate.net/publication/369505287
4. Rias Untian Hanun CF. *Literature Analysis on Financial Distress and Bankruptcy Prediction*.; 2025. doi:10.70764/gdpu-fr.2025.1(1)-02
5. Kompas.com. 7.Perusahaan di BEI Didominasi Bisnis Keluarga, Jumlahnya 95 Persen_files. *Money Kompas*. 2025;(Jakarta). Accessed November 14, 2025. https://money.kompas.com/read/2025/07/24/182837926/perusahaan-di-bei-didominasi-bisnis-keluarga-jumlahnya-95-persen?page=all
6. Wibowo FA, Satria A, Gaol SL, Indrawan D. Financial Risk, Debt, and Efficiency in Indonesia's Construction Industry: A Comparative Study of SOEs and Private Companies. *Journal of Risk and Financial Management*. 2024;17(7). doi:10.3390/jrfm17070303
7. Nguyen HO. The Impact of Foreign Ownership and the Moderating Role of Ownership Concentration on the Financial Performance of Listed Non-Financial Firms in Vietnam. *Management (Montevideo)*. 2025;3:347. doi:10.62486/agma2025347

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IJCSRR @ 2025
www.ijcsrr.org

8. Dila Sriwahyuni, Peny Cahaya Azwari, Rachmania. Analisis Perbandingan Tingkat Akurasi Model Altman Z-Score, Springate, Zmijewski, Taffler, dan Grover dalam Memprediksi Financial Distress Pada BPD yang Memiliki UUS Tahun 2019-2024. Published online 2025. doi:10.32502/balance.v10i2.932
9. IAI. *PSAK 201: Penyajian Laporan Keuangan*. Ikatan Akuntan Indonesia; 2022.
10. Afriani R, Kurniawan Tjakrawala F. International Journal of Current Science Research and Review The Impact of Audited Financial Statement Announcements on Stock Returns and Liquidity: Evidence from LQ45 Companies in Indonesia. doi:10.47191/ijcsrr/V8-i6-51
11. Primasari NS. ANALYSIS ALTMAN Z-SCORE, GROVER SCORE, SPRINGATE AND ZMIJEWSKI AS FINANCIAL DISTRESS SIGNALING (Empirical study of consumer goods industry in Indonesia). *Accounting and Management Journal*. 2017;1(1). doi:10.13140/RG.2.2.34759.39844
12. Wau M, Fau JF, Fau FT. The Effect of Financial Factors on Financial Distress in Manufacturing Companies on the IDX. *Jamanika (Jurnal Manajemen Bisnis dan Kewirausahaan)*. 2025;5(2):153-165. doi:10.22219/jamanika.v5i2.40727
13. Altman, Edward I. *FINANCIAL RATIOS, DISCRIMINANT ANALYSIS AND THE PREDICTION OF CORPORATE BANKRUPTCY*.; 1968.

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