Bankruptcy Risk Mitigation: A Strategy for Analyzing Bank Health Based on RGEC Towards BPR Sustainability

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Abstract

The purpose of this study is to investigate the effect of bank soundness, assessed using the RGEC framework (risk profile, good corporate governance, earnings, and capital), on the financial distress of rural credit banks in Malang Raya, utilizing financial reports from March 2024 through March 2025. All Rural Banks (BPRs) operating in the Greater Malang area were included as the population of this study. Using purposive sampling, the study sampled 17 BPRs in Greater Malang over a two-year period, resulting in 34 data sets. This mixed-methods study combined qualitative and quantitative approaches and was then analyzed using multiple regression analysis. The study reveals that financial distress is significantly affected by NPL, GCG, ROA, and CAR.

Keywords: *Financial Distress, GCG, RGEC, Sustainability.*

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A. INTRODUCTION

Rural Credit Banks (BPR) are microfinance institutions that play a vital role in driving local economic growth, particularly through financing for MSM Es. As community-oriented financial institutions, BPRs have the advantage of providing easier access to capital compared to commercial banks. Flexible credit processes, requirements, and a more accessible service network make BPRs a primary choice for microfinance actors who often struggle to obtain funding from conventional financial institutions like commercial banks (Lusy & Widyastuti, 2023) And (Radiallah et al., 2023). However, challenges that threaten the sustainability of rural banks include the risk of bankruptcy due to liquidity difficulties, weak corporate governance, and increasing competition for fintech-based loans (Kumara & Suryanata, 2023). If BPRs are unable to maintain their financial health, the sustainability of MSMEs will also be threatened, which could disrupt the stability of the local economy as a whole (Nengsih et al., 2024).

Facts on the ground show that there is cause for concern regarding the sustainability of BPR, as reported by Bisnis.com on December 17, 2024. Fajarihza (2024), OJK revoked the business licenses of 20 BPRs because they did not comply with regulatory requirements and problems. This serious liquidity crisis serves as a warning that the rural bank (BPR) sector is not doing well. If not addressed immediately, the potential for bankruptcies in Indonesia, which has reached 1,369 BPRs, could spread, making strategic mitigation necessary.

The most widely used method for assessing bank health is the CAMEL (Capital, Asset, Management, Earnings, Liquidity) approach. However, this method

is considered insufficiently comprehensive because it focuses solely on financial performance, without in-depth consideration of risk and governance (Dewi, 2024). Therefore, structured on the RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) model based assessment approach is more relevant because it adopts more holistic risk management principles and emphasizes the importance of good governance in maintaining bank sustainability (Fitriyani, 2021) and (Gasperz et al., 2022). The RGEC method allows for a more accurate evaluation of risk dimensions, corporate governance quality, profitability, and capital adequacy (Dewi & Prasetyo, 2023) and (Fauzan et al., 2021). In addition, it can provide early signals of potential problems that will arise, so that BPR management can take mitigation steps before the risk develops into a crisis (Pangaribuan et al., 2024). Thus, the RGEC-based strategy is expected to serve as an early detection tool and a guide in strengthening the resilience of rural banks amidst dynamic economic challenges.

Malang Raya as one of the largest MSME-based economic growth areas in East Java, BPR holds a vital position within the region accordingly, the study intends to examine the impact of BPR health assessment with the RGEC framework on the potential for bankruptcy and formulate strategies that need to be carried out in maintaining the health of BPR in Malang Raya.

This study aims to examine how the assessment of Rural Bank (BPR) health using the RGEC framework influences the risk of bankruptcy, particularly by identifying which dimensions—risk profile, Good Corporate Governance (GCG), earnings, and capital—have the strongest effect on financial instability. Furthermore, this research seeks to formulate strategic actions that BPRs throughout Greater Malang need to implement in order to maintain financial soundness and prevent bankruptcy. These strategies are expected to strengthen risk management, enhance governance quality, improve profitability, and ensure adequate capital levels so that BPRs can operate sustainably and remain resilient amid economic challenges.

This study is considered urgent, as it is tied to the critical aspect of safeguarding rural banks' sustainability (BPRs) but also in their contribution to supporting financing for MSMEs, the backbone of the local economy. Although alternative funding sources include commercial banks, cooperatives, and fintech, not all banks provide People's Business Credit (KUR) facilities. Cooperatives have limited capital, and fintech companies charge high interest rates. In this context, rural banks (BPRs) remain a crucial player in ensuring inclusive and sustainable access to capital (Fitriyani, 2023).

B. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

1. People's Economic Bank

According to Law No. 4 of 2023, a People's Economic Bank (BPR) is a micro-scale banking institution that operates conventionally and based on Sharia principles but does not provide direct giro payment services. The scope of BPR's business is more limited than that of commercial banks, as it is prohibited from accepting deposits in the form of demand deposits, engaging in other activities, or engaging in

insurance. Its role is to support local economic growth by providing fast, easy, and affordable access to financing for communities unserved by commercial banks, as well as increasing financial inclusion and literacy in the regions.

2. Financial Distress

Financial distress occurs when an organization suffers substantial financial difficulties, hindering its ability to settle obligations as they fall due (Brigham, 2019). If financial distress occurs in a bank, the bank has the potential to experience financial difficulties in the form of an inability to pay customer deposits, an inability to meet minimum capital requirements, and difficulty maintaining liquidity (Kristiana et al., 2022).

This condition is an early sign that the company is at risk of default or bankruptcy if it is not handled immediately (Fitriyani, 2023). The measurement uses the Bankometer model (S-Score) because it is considered more accurate in mitigating financial distress compared to the Altman Z-Score model (Fadilah et al., 2024). According to the IMF, this model is preferable since it offers a more reliable and contextually appropriate measure of bank financial health as an early warning system in developing countries characterized by a high level of dependence on banks as a source of financing (Manurung et al., 2024). According to (Fadilah et al., 2024), S-Score is formulated with the following formula: S-Score = 1.5CA + 1.2EA + 3.5CAR + 0.6NPL + 0.3CI + 0.4LA

CA refers to Capital-to-Assets; EA stands for Equity-to-Assets; CAR denotes the Capital Adequacy Ratio; NPL represents the Non-Performing Loan Ratio; CI indicates the Cost-to-Income ratio; and LA corresponds to the Loan-to-Assets ratio. If the S-Score > 70 means the bank is in a healthy financial condition; 50 < S-Score < 70 means the bank is in a gray area (problematic financial condition); S-Score < 50 means the bank shows signs of financial instability.

3. Bank Health Assessment

In line with OJK Regulation No. 3/POJK.03/2022 regarding the evaluation of bank soundness, BPRs adopt the RGEC approach (Risk Profile, Good Corporate Governance, Earnings, Capital) to strengthen governance and risk management effectiveness.

According to Parwoto & Sari (2022) The Non-Performing Loan (NPL) ratio functions as a measure of a bank's risk exposure profile that demonstrates the effectiveness of its credit risk management. This allows the bank to assess the risk of losses due to debtors defaulting on their financial obligations, either partially or fully, as agreed upon. Some of the reasons for this default include business bankruptcy, job loss, or worsening economic conditions.

$$\boldsymbol{NPL} = \frac{\textbf{Non-Performing Loans}}{\textbf{Total Credit}} \text{x } 100\%$$

Bank health categories based on NPL values are: NPL < 2% is classified as very healthy; 2% ≤ NPL < 5% is classified as healthy; 5% ≤ NPL < 8% is classified as

fairly healthy; 8 ≤ NPL < 12% is classified as less healthy; NPL ≥ 12% is classified as unhealthy.

The implementations Good Corporate Governance (GCG) in Indonesia still faces various serious problems, especially due to weak management commitment, a deep-rooted culture of corruption and nepotism due to the lack of consistent enforcement of regulations.(Fitriyani, 2021). As a result, public trust in the business world can decline, increasing the risk of losses and the potential for financial scandals that are difficult to avoid without comprehensive improvements. In OJK regulation Number 4/POJK.03/2015, BPRs are required to conduct self-assessments and determine GCG composite ratings based on 11 assessment factors. The final results of the assessment are classified into 5 composite ratings, namely: Rating 1 (if the composite value <1.5) reflects a very healthy bank condition; Rating 2 (if the composite value 1.5 <composite <2.5) reflects a healthy bank condition; Rating 3 (if the composite value 2.5 <composite <3.5) reflects a fairly healthy bank condition; Rating 4 (if the composite value 3.5 <composite <4.5) reflects a less healthy bank condition; Rating 5 (if the composite value 4.5 <composite <5) reflects an unhealthy bank condition.

ROA, as a measure of profitability, illustrates the extent to which a company, such as a bank, can maximize the use of its assets to obtain profits. A greater ROA indicates stronger performance because it means the assets are highly productive in generating returns (Parwoto & Sari, 2022).

$$\boldsymbol{ROA} = \frac{\boldsymbol{Earnings\ After\ Tax}}{\boldsymbol{Total\ Assets}} \text{x } 100\%$$

According to OJK Regulation No. 20/POJK.03/2014 on the Assessment of BPR Soundness, ROA is categorized as follows: ROA greater than 1.5% indicates a very healthy condition; between 1.25% and 1.5% shows a healthy condition; between 0.5% and 1.25% reflects fairly healthy; between 0% and 0.5% indicates less healthy; while ROA of 0% or below signifies an unhealthy condition.

The Capital Adequacy Ratio (CAR) reflects the level of capital a bank holds in relation to the risks linked with its productive assets. It reflects the strength of the bank's capital position, with higher values signifying improved capacity to absorb potential credit or other risk-related losses (Parwoto & Sari, 2022).

$$\boldsymbol{CAR} = \frac{\boldsymbol{Capital}}{\boldsymbol{ATMR}} \text{x } 100\%$$

CAR rating based on OJK Regulation No. 20/POJK.03/2014 concerning Assessment of BPR Health Level: CAR ≥ 12% reflects a very healthy bank condition; 9% ≤ CAR < 12% reflects a healthy bank condition; 8% ≤ CAR < 9% reflects a fairly healthy bank condition; 6% < CAR < 8% reflects a less healthy bank condition; CAR ≤ 6% reflects an unhealthy bank condition.

4. The Influence of Risk Profile on Financial Distress

The risk profile is assessed through Non-Performing Loans (NPL), which indicate the degree of defaulted loans due to debtors failing to pay principal and/or interest after 90 days or more. The higher a bank's NPL ratio, the greater the risk of

financial distress, as increasing non-performing loans will reduce interest income, increase loss provisioning costs, and worsen the bank's profitability and liquidity. According to (Herawaty et al., 2022) NPL reflects weak credit risk management and can be an early signal of disruption to a banking institution's financial stability. Research result (Tejo & Hanggraeni, 2020). The study revealed that the NPL ratio significantly affects the prediction of financial distress in conventional banks, with elevated NPL levels increasing the risk of financial hardship.
H_1: NPL influences the reduction of financial distress.

5. The Influence of GCG on Financial Distress

Good Corporate Governance (GCG) describes the systems, principles, and mechanisms that companies use to manage and oversee business activities in a transparent, accountable, and responsible manner. Yuliani & Haryati (2022), implementing GCG means helping companies avoid financial distress by increasing the effectiveness of management supervision and strategic decision making. Study Shiddiq et al., (2025) revealed that the implementation of good GCG by assessing the effectiveness. The responsibilities assumed by the board of commissioners, directors, and audit committee assist in decreasing the risk of firms facing financial distress, particularly amid the economic uncertainty brought by the COVID-19 pandemic.
H_2: GCG has an effect on mitigating financial distress.

6. The Influence of Earnings on Financial Distress

Earnings, measured by Return on Assets (ROA), this indicator shows how effectively a company can generate earnings from its overall assets. The larger the ROA, the more productive the company is in turning assets into profit (Fitriyani, 2023). Companies with high ROA tend to have healthier financial conditions and a lower risk of financial distress. Research Margaretha & Wijaya (2023) shows that ROA contribute to mitigating financial distress.
H_3: ROA contributes to mitigating financial distress.

7. The Influence of Capital on Financial Distress

Capital, as proxied measured through the Capital Adequacy Ratio (CAR), demonstrates the extent to which a bank can withstand possible losses while fulfilling its financial commitments, particularly in maintaining capital stability and soundness against the risks of its assets, Fadhillah et al., (2024) if the company's CAR value is high. Shows that banks have a strong capital structure, which significantly reduces the risk of experiencing financial distress. Yuliani & Haryati (2022) revealed that this was because banks with high CAR were considered more capable of facing financial pressure and maintaining their operational continuity on an ongoing basis.
H_4: CAR has an effect on mitigating financial distress

C. METHOD

A mixed-methods design is utilized in this research, integrating both qualitative and quantitative methods. The qualitative approach is carried out using interview techniques with informants consisting of directors (as internal parties), perbarindo (as an external party that supervises BPR) and customers (as stakeholders) which are primary data to deepen the implementation of GCG in BPR. The research population included the entire set of 47 BPRs located in the Malang Raya area. Fourteen BPRs did not publish financial reports for two years (as of March 2024 and 2025), and 16 BPRs experienced consecutive losses during that period. Therefore, the final sample applied in this research was 17 BPRs. Because the data analyzed covered two years of observation, the total analysis unit was 34 observational data (17 BPRs multiplied by two years).

Data collection involved interviews with informants for the primary data and financial reports of each institution for the secondary data BPR through https://ojk.go.id/ to measure variables representing Non Performing Loans (NPL), Return on Assets (ROA), Capital Adequacy Rasio (CAR), and financial distress conditions in each bank. The analysis was conducted using SPSS version 27 software. Before conducting the regression test, a classical assumption test was first conducted, followed by a t-test to determine the effect of each variable. The analysis was conducted using SPSS version 27 software. Before conducting the regression test, a classical assumption test was first conducted, followed by a t-test to determine the effect of each variable. The results of this analysis are expected to provide a strategic overview of the financial health of BPRs and their bankruptcy risk mitigation efforts based on the RGEC approach.

D. RESULT AND DISCUSSION

1. Descriptive Statistical Analysis

Provides the minimum, maximum, average (mean), and standard deviation figures for every variable (Ghozali, 2021), so that the data trends are known and potential outliers or initial deviations are identified, where the results become the basis for evaluating the feasibility of the data when applied in multiple linear regression analysis and provide an initial picture of the financial health conditions and bankruptcy risks of BPRs in Malang Raya.

Table 1. Descriptive Statistical Analysis

Variable	Minimum	Maximum	Mean	Standard Deviation
NPL	1.62	25.55	10.83	7.65
GCG	1.20	2.15	1.52	0.28
ROA	0.45	7.73	2.56	1.60
CAR	0.00	193.06	58.06	38.36
FD	148.22	329.53	213.29	41.85

Source: Processed data, 2025

The mean NPL value was 10.83 with a standard deviation of 7.65, indicating a fairly high level of variation in BPR credit quality. GCG with a mean score of 1.52

and a minimal standard deviation of 0.28, indicating relatively consistent governance implementation across BPRs. ROA showed an average of 2.56, reflecting moderate profitability with a standard deviation of 1.60. Meanwhile, CAR had a very wide spread with an average of 58.06 and a standard deviation of 38.36, indicating significant differences in capitalization across BPRs. FD had an average of 213.29 and a standard deviation of 41.85, indicating that the level of financial stress faced by BPRs varied considerably.

2. Classical Assumption Test

Used to verify that the residuals in a multiple linear regression model follow a normal distribution, which is a key prerequisite in regression analysis to allow accurate and unbiased interpretation of statistical results (Ghozali, 2021).

Table 2. Normality Test

		Unstandardized Residual
N		34
Normal Parametersa,b	Mean	0.0000000
	Standard Deviation	13.81955404
Most Extreme Differences	Absolute	0.125
	Positive	0.125
	Negative	-,077
Test Statistics		0.125
Asymp. Sig. (2-tailed)		0.197c

Source: Processed Data, 2025

The normality test of the residuals, conducted using the Kolmogorov-Smirnov method with 34 data points, produced a mean residual of 0.00 and a standard deviation of 13.82, showing that the distribution is centered around zero. The Asymp. Sig. (2-tailed) result of 0.197, which exceeds the 0.05 significance threshold, shows that the residuals follow a normal distribution, thereby meeting the fundamental assumptions of multiple linear regression. The fulfillment of the normality assumption ensures that the regression model in this study is valid for testing how NPL, GCG, ROA, and CAR affect financial distress among BPRs in Malang Raya.

According to Ghozali (2021), the aim is to identify potential strong linear associations among the independent variables (NPL, GCG, ROA, and CAR), since their presence may reduce the reliability of regression results and distort coefficient estimates. The detection process involves examining tolerance levels and VIF values, where tolerance above 0.10 and VIF below 10 confirm no multicollinearity symptoms in the regression model. because if present, it can disrupt the accuracy of the regression results, causing instability in the regression coefficient estimates. Testing is carried out by examining the tolerance value and VIF (variance inflation factor), by detecting if the tolerance value is > 0.10 and VIF < 10 indicates no symptoms of multicollinearity in the model.

Table 3. Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	NPL	0.658	1,519
	GCG	0.443	2,257
	ROA	0.440	2,272
	CAR	0.667	1,498

Source: Processed Data, 2025

The outcomes of the Tolerance and VIF assessments confirm that this regression model shows no signs of multicollinearity, with the independent variables (NPL, GCG, ROA, CAR) not exerting significant mutual influence.

This is done to identify whether there is inequality in the variance of the residuals in the regression model used.(Ghozali, 2021)Heteroscedasticity needs to be avoided so that the interpretation of the relationship between RGEC indicators and the risk of BPR bankruptcy can be carried out accurately, reliably and supports the main objective of building an effective sustainability strategy for BPR.

Table 4. Heteroscedasticity Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4,465	14,409		-0.310	0.759
	NPL	0.231	0.230	0.219	1,005	0.323
	GCG	5,831	7,539	0.206	0.773	0.446
	ROA	1,407	1,344	0.279	1,047	0.304
	CAR	0.009	0.046	0.041	0.188	0.852

Source: Processed data, 2025

The results of the test show that the significance values for all variables (NPL, GCG, ROA, CAR) exceeded 0.05, specifically 0.323, 0.446, 0.304, and 0.852. This outcome suggests the absence of heteroscedasticity in the regression model, indicating that it satisfies the classical assumptions of linear regression analysis.

3. Multiple Linear Regression Test Results

The influence of RGEC variables on the probability of bankruptcy among rural banks was analyzed using multiple linear regression. By applying this method, researchers are able to identify the explanatory power of each independent variable and recognize the variable that exerts the highest influence (Ghozali, 2021). The results of this analysis serve as the basis for formulating appropriate strategies to mitigate bankruptcy risk and support the sustainable performance of rural banks.

Table 5. Multiple Linear Regression Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Beta	Beta		
1	(Constant)	25,892	25,892		-0.435	0.667
	NPL	0.413	0.413	0.633	8,384	0,000
	GCG	13,547	13,547	0.599	6,504	0,000
	ROA	2,415	2,415	0.503	5,448	0,000
	CAR	0.082	0.082	0.294	3,913	0.001

Source: Processed data, 2025

According to the results of the multiple linear regression test in Table 5, the regression equation can be formulated as follows: FD = −11,265 + 3,463 NPL + 88,116 GCG + 13,155 ROA +0.320 CAR. The intercept value of -11.265 suggests that when all independent variables (NPL, GCG, ROA, and CAR) are set to zero, the dependent variable (Financial Distress) would equal -11.265. The NPL coefficient of 3.463 means that a one-unit rise in NPL leads to an increase of 3.463 in the S-Score, assuming other variables remain unchanged. This indicates that higher NPL values decrease bankruptcy risk by 3.463. The GCG coefficient of 88.116 shows that for every additional unit of GCG, the S-Score rises by 88.116, provided other factors stay constant. This implies a one-unit gain in GCG reduces the likelihood of bankruptcy by 88.116. The ROA coefficient of 13.155 reflects that a one-unit improvement in ROA increases the S-Score by 13.155, with other variables held constant. Thus, each unit increase in ROA lowers bankruptcy risk by 13.155. The CAR coefficient of 0.320 indicates that every one-unit increase in CAR contributes 0.320 to the S-Score, keeping other factors constant. This suggests that higher CAR reduces the probability of bankruptcy by 0.320.

4. Coefficient of Determination Test

To evaluate how RGEC variables contribute to explaining differences in bankruptcy risk among rural banks, the coefficient of determination (R^2) is used to show the proportion of variability in the financial condition or potential bankruptcy of a rural bank that can be explained by the RGEC-based regression model. The higher the R^2 value, the greater the model's ability to explain the conditions under study.Ghozali (2021)which indicates that RGEC-based strategies are effective in systematically identifying and mitigating bankruptcy risks.

Table 6. Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.944a	0.891	0.876	14,741

Source: Processed data, 2025

The obtained R Square value of 0.891 means that 89.1% of financial distress variation is explained by NPL, GCG, ROA, and CAR. This proves the regression model is highly reliable in predicting BPRs' financial condition since it accounts for almost all observed variations.

The adjusted coefficient of determination (Adjusted R^2) square value of 0.876 corrects the R^2 to maintain validity despite the large number of predictors in the model. This value is still very high, indicating that the model remains accurate and is not overfitting. Meanwhile, The Standard Error of the Estimate, valued at 14.741, shows the extent to which the observed dependent variable differs from the model's predicted values. A lower score reflects greater accuracy, and this value is still deemed acceptable for financial forecasting purposes.

5. t- Statistic Test

The first hypothesis states that NPLs influence financial distress. The relationship between NPLs and the risk of financial distress is demonstrated by a regression coefficient of 3.463 Because the significance level was 0.000, which falls below the 0.05 threshold, the regression coefficient is considered significant. This result demonstrates that NPLs positively and significantly impact the S-Score in mitigating bankruptcy, thus supporting H1.

The second hypothesis is that GCG influences financial distress. The relationship between GCG and the likelihood of financial distress is demonstrated by a regression coefficient of 88.116 with a significance level of 0.000. At a significance level of $\alpha = 0.05$, the regression coefficient is significant because $\varrho = 0.000 < 0.05$. Based on the results of this hypothesis testing, it can be concluded that GCG significantly influences the S-Score value in mitigating bankruptcy and H2 is accepted.

The third hypothesis, ROA influences financial distress. The criteria for the relationship between ROA and the possibility of financial distress is indicated by a regression coefficient value of 13.155 with a significance value of 0.000. At a significance level of $\alpha = 0.05$, the regression coefficient is significant because $\varrho = 0.000 < 0.05$. Based on the results of the hypothesis testing, it can be concluded that ROA has a significant effect on the S-Score in mitigating bankruptcy, leading to the acceptance H3.

The fourth hypothesis, CAR has a significant effect positive effect on financial distress. The relationship between CAR and the likelihood of financial distress is indicated by a regression coefficient of 0.320 with a significance level of 0.001. At a significance level of $\alpha = 0.05$, the regression coefficient is significant because $\varrho = 0.001 < 0.05$. Based on the results of the hypothesis testing, it can be concluded that CAR has a significant effect on the S-Score value in mitigating bankruptcy so H4 is supported.

This study found that NPLs had a positive and significant effect on the S-Score, which is used as a measure to predict financial distress in rural banks (BPRs) in Greater Malang. Increasing non-performing loans resulted in an increase in the S-Score, with a higher S-Score indicating a healthier bank. Therefore, this study successfully revealed that high non-performing loans reduce the risk of bankruptcy.

According to(Kasmir, 2019)High non-performing loans (NPLs) will increase costs, potentially leading to a larger number of non-performing loans. However,

high NPLs do not necessarily increase the risk of bankruptcy. Banks with substantial capital, balanced by adequate loan loss provisions (CKPN) and strong financial liquidity can support rising NPLs without disrupting operational stability, thus maintaining a secure capacity to absorb losses.

Aggressive credit growth, which triggers a percentage increase in non-performing loans (NPLs), could be due to the expansion into new, higher-risk segments. However, increased interest income and bank margins could potentially offset the risk of losses. If non-performing loans are dominated by large borrowers with strong collateral, the collateral's value could cover a significant portion of the principal, thus keeping the risk of bankruptcy low even if NPLs statistically increase. The findings of this study are consistent with the research (Rustandi, 2020) which demonstrated that NPL significantly influenced financial distress in BPRs located in Yogyakarta.

The findings of this research indicate that GCG positively and significantly affects the S-Score, which serves as a predictor of financial distress in rural banks (BPRs) within Greater Malang. A higher GCG composite score indicates poorer BPR management; a higher S-Score indicates a healthier BPR. This study successfully revealed that poorer BPR governance actually results in a lower bankruptcy risk.

Moral hazard behavior, or opportunistic behavior, exists where BPR managers take aggressive steps to improve short-term financial reports by delaying the recording of losses and providing high-risk loans that quickly generate interest. This makes the BPR appear healthy on paper, while actually concealing problems. These figures are manipulated and manipulated to appear good, resulting in calculations showing low risk, even though the actual situation is not that good. (Fitriyani, 2021). The results of this study support the research Shiddiq et al., (2025) which reveals that GCG has an impact on the risk of bankruptcy.

The findings of this research indicate that ROA exerts a significant positive influence on the S-Score, which is used as a measure to predict financial distress in rural banks (BPRs) in Greater Malang. Increasing ROA, which indicates a bank's ability to generate profits from its assets, results in an increase in the S-Score, where a higher S-Score indicates a bank's health. Therefore, this study successfully reveals that a high ROA reduces the risk of bankruptcy.

A high ROA means that every rupiah of assets owned is capable of generating greater profits. This efficiency indicates management's ability to maximize assets to generate revenue, thus providing the rural bank with sufficient cash flow to meet obligations and reducing the risk of default. High profits increase equity through retained earnings. Strong capital provides a buffer to absorb unexpected losses, thereby strengthening financial resilience and reducing the risk of insolvency. Furthermore, profits generated from assets can be used to pay interest, principal installments, and other obligations, thus reducing the risk of default. The study results validate the conclusions of previous research Mahmud et al., (2021) which reveals that ROA has a significant effect on bankruptcy risk.

This study demonstrates that CAR has a positive and significant effect on the S-Score, which is used as a measure to predict financial distress in rural banks (BPRs) in Greater Malang. An increase in CAR indicates a bank's capital capacity to cover the risk of losses from its assets, resulting in an increase in the S-Score. A higher S-Score indicates a bank's health. This study successfully revealed that a high CAR reduces the risk of bankruptcy.

Adequate capital enables banks to cover the risks of loan defaults and market fluctuations. This capital serves as a buffer, absorbing losses before they impact third-party (customer) funds, thus lowering the potential risk of bankruptcy. A high CAR indicates a bank's capital adequacy above the minimum capital adequacy threshold (CAR) set by the Financial Services Authority (OJK). Investors, customers, and regulators will view the bank as a healthy entity, reducing the risk of a bank run, or a massive withdrawal of funds that could trigger bankruptcy. The results of this study support the research Humaira et al., (2021) and Mahmud et al., (2021) which reveals that CAR has a significant effect on bankruptcy risk.

E. CONCLUSION

NPLs significantly influence financial distress, with increases in NPL levels accompanied by decreases in financial distress risk. High NPLs do not always indicate a bank's deteriorating health; rather, they can reflect management's ability to control non-performing loan risk. GCG has a significant positive impact on improving the S-Score of rural banks in Greater Malang, indicating improved health and a reduced risk of bankruptcy. GCG ensures clear roles, wise decisions, and maintained public trust. ROA has a significant positive effect on the S-Score, which is a predictive measure of BPR bankruptcy in Malang. An increase in ROA indicates the bank's ability to generate income. Profits greater than its assets thereby strengthening liquidity and providing a buffer to cover potential bankruptcy. CAR has a significant positive effect on the S-Score, which reflects bankruptcy risk. Adequate capital acts as a buffer to absorb losses without disrupting customer funds, maintaining public and regulatory trust.

REFERENCES

1. Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of Financial Management*. Cengage Learning.
2. Dewi, M. P. (2024). Camel Analysis in Assessing BPR's Health Level for 2021-2023 Period. *JIM UPB (Jurnal Ilmiah Manajemen Universitas Putera Batam)*, *12*(2), 587-595. https://doi.org/10.33884/jimupb.v12i2.8879
3. Dewi, M. P., & Prasetyo, I. B. (2023). Pengaruh Risiko Keuangan dan Pertumbuhan Penjualan Terhadap Profitabilitas (Sebagai Variable Intervening) dan Nilai Perusahaan Farmasi Periode 2020-2022. *Jurnal Manajemen dan Profesional*, *4*(2), 225-239. https://doi.org/10.32815/jpro.v4i2.2055
4. Fadhillah, R., Syaadah, N., Mairijani, M., & Mahyuni, M. (2024, August). How Capital Adequacy, Liquidity and Profitability Impact Financial Distress in

Islamic Rural Banks in Indonesia. In *Proceeding of The International Conference on Business and Economics* (Vol. 2, No. 2, pp. 89-106). https://doi.org/10.62951/ijecm.v1i4.232

5. Fadilah, A. N., & Rois, M. (2024). Prediksi Financial Distress Bank Menggunakan Metode Bankometer. *Jurnal Akuntansi Trisakti*, *11*(1), 129-140.
6. Fajarihza, R. F. (2024). *Bertambah Lagi! 20 Bank Tutup di RI jelang Akhir 2024, Ini Daftarnya.* Retrieved from: https://finansial.bisnis.com/read/20241217/90/1825096/bertambah-lagi-20-bank-tutup-di-ri-jelang-akhir-2024-ini-daftarnya
7. Fauzan, M., Hardana, A., Nasution, A. A., & Pasaribu, M. (2021). Analisis Perbandingan Metode CAMELS Dan Metode RGEC Dalam Menilai Tingkat Kesehatan PT. Bank Panin Dubai Syariah, Tbk. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi dan Perbankan Syariah*, *6*(3), 815-832. https://doi.org/10.30651/jms.v6i3.9998
8. Fitriyani, Y. (2021). Pengaruh dewan komisaris, dewan direksi dan komite audit terhadap profitabilitas perbankan di BEI tahun 2017-2019. *Jurnal Imiah Manajemen, EKonomi, Dan Akuntansi*, *5*(2), 849-867. https://doi.org/10.31955/mea.v5i2.1186
9. Fitriyani, Y. (2023). Analisa Komparasi dan Uji Akurasi Model Altman, Grover, Springate dan Zmijewski dalam Mendiagnosis Kebangkrutan Emiten Saham Jasa Transportasi di Bursa Efek Indonesia Pada Masa Pandemi. *J-MAS (Jurnal Manajemen dan Sains)*, *8*(1), 590-598. https://doi.org/10.33087/jmas.v8i1.813
10. Gasperz, J., Sososutiksno, C., & Limba, F. B. (2022). Good Company Governance and Risk Management on Company Value with Bank Performance. *Jurnal Akuntansi*, *26*(3), 531-547. https://doi.org/10.24912/ja.v26i3.1040
11. Ghozali, I. (2021). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 26*. Semarang: Badan Penerbit Universitas Diponegoro.
12. Herawaty, V., Juniari, N. P. E., & Dachi, B. (2022). *The Effect of Risk Disclosure, Non-Performing Loans and Operational Cash Flows on Financial Distress with Corporate Governance as a Moderating Variable*. LePALISSHE 2021, August 03, Malang, Indonesia.
13. Humaira, J., Barnas, B., & Kristianingsih, K. (2021). Pengaruh Kinerja Keuangan dan Penerapan GCG terhadap Potensi Kebangkrutan pada PT Bank Muamalat Indonesia Tbk. *Journal of Applied Islamic Economics and Finance*, *1*(2), 373–383. https://doi.org/10.35313/jaief.v1i2.2471
14. Kasmir. (2019). *Analisis Laporan Keuangan*. Depok: Raja Grafindo Persada.
15. Kristiana, D. R., Limbong, N. D., & Hatta, A. J. (2022). Potensi Financial Distress Pada Bank Umum Berbasis RGEC. *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha*, *13*(03), 973-984. https://doi.org/10.23887/jimat.v13i03.45255
16. Kumara, N. R., & Suryanata, I. G. N. P. (2023). Strategi BPR Dalam Menghadapi Gempuran Fintech. *Jmm Unram-Master of Management Journal*, *12*(1), 46-52. https://doi.org/10.29303/jmm.v12i1.744
17. Lusy, L., & Widyastuti, M. (2022). Kinerja Bank Perkreditan Rakyat (BPR) Dalam

Penguatan UMKM. *Jurnal Akuntansi dan Pajak (JAP)*, *23*(2), 1-8. https://doi.org/10.29040/jap.v23i2.6876

18. Mahmud, A. J., & Waskito, I. (2021). Analisis Pengaruh Kinerja Keuangan dan Good Corporate Governance Terhadap Financial Distress (Studi Kasus pada Perusahaan Perbankan di BEI Tahun (2016-2018). *Jurnal Riset Mahasiswa Akuntansi*, *1*(4), 55-66. https://doi.org/10.29303/risma.v1i4.107
19. Manurung, K. A. A., Siregar, H., Hakim, D. B., Fahmi, I., & Novianti, T. (2024). Business Model and Strategy for Sustainable Lending of State-Owned Banks in Indonesia. *Journal of Risk and Financial Management*, *17*(9), 386. https://doi.org/10.3390/jrfm17090386
20. Margaretha, J., & Wijaya, H. (2023). the Impact of Car, Credit Risk, Roa, Ldr, and Ownership Structure Towards Financial Distress. *International Journal of Application on Economics and Business*, *1*(2), 521-531. https://doi.org/10.24912/ijaeb.v1i2.521-531
21. Nengsih, I., Iska, S., Dewi, M. P., Rani, W. M., & Oktaviani, Y. (2024). Risk Management Frameworks in Islamic Microfinance: A Pathway to Financial Stability in Humanitarian Crisis Situations. In *Iqtishaduna International Conference Proceeding* (Vol. 1, pp. 237-246).
22. Pangaribuan, J. J., Zakaria, M., Dewi, M. P., Barlian, A., Siskawati, E., Tandiawan, V., ... & Judijanto, L. (2024). *MANAJEMEN RISIKO: Konsep dan Penerapan*. Yayasan Literasi Sains Indonesia.
23. Parwoto, P., & Sari, I. A. (2022). Analisis Komparasi Tingkat Kesehatan dan Potensi Kebangkrutan pada BPR Pemerintah di DIY Menggunakan Metode RGEC. *Akuntoteknologi: Jurnal Ilmiah Akuntansi dan Teknologi*, *14*(2), 128–139. https://doi.org/10.31253/aktek.v14i2.1814
24. Radiallah, Hidayati, A., & Haryanti, P. (2023). The Role Of Islamic BPR In The Development Of Msmes Through Murabahah Financing: (Case Study Of PT. BPR Syariah Lantabur Tebuireng). *JIES: Journal of Islamic Economics Studies*, *4*(1), 27–40. https://doi.org/10.33752/jies.v4i1.5831
25. Rustandi, F. (2020). *Pengaruh RGEC (Risk Profile, Corporate Governance, Earnings, Capital) Terhadap Financial Distress Bank Perkreditan Rakyat di Yogyakarta Periode 2015-2017* (Doctoral Dissertation, Universitas Islam Indonesia).
26. Shiddiq, F. R. A., Dharma, F., Komalasari, A., & Octary, A. D. (2025). Pengaruh Good Corporate Governance (GCG) Terhadap Financial Distress Saat Pandemi Covid-19: Studi Empiris pada Perusahaan Badan Usaha Milik Negara yang Terdaftar pada Bursa Efek Indonesia pada Tahun 2019-2023. *Jurnal Ekonomi, Akuntansi, dan Perpajakan*, *2*(2), 110–127. https://doi.org/10.61132/jeap.v2i2.923
27. Tejo, B. A., & Hanggraeni, D. (2020, December). The effects of credit risk and financial performance to financial distress prediction of listed banks in Indonesia. In *The International Conference on Business and Management Research (ICBMR 2020)* (pp. 151-156). Atlantis Press.
28. Yuliani, SM, & Haryati, T. (2022). The Effect of RGEC (Risk Profile, Good Corporate Governance, Earnings and Capital) on Financial Distress of Banking

Companies in Indonesia. *Al-Kharaj: Journal of Islamic Economics, Finance & Business, 5*(1), 453–468. https://doi.org/10.47467/alkharaj.v5i1.1719