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# ASSESSMENT OF BANK HEALTH LEVEL USING RGEC METHOD AND ITS IMPACT ON ISLAMIC FINANCIAL DISTRESS

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## KEYWORDS

#### **ABSTRACT**

bank soundness level, financial distress, risk profile, good corporate governance, earnings, capital.

Bank Indonesia has established rules regarding bank health so that banks are always expected to be healthy it will not harm the people interested in banking. This study aimed to analyze the effect of bank soundness level on financial distress using the RGEC method at Islamic Commercial Banks in Indonesia either partially or simultaneously. This research uses a descriptive quantitative approach using the RGEC method; the object of this research is Islamic Commercial Banks in Indonesia from 2013-2020. The sample collection technique used purposive sampling, with a sample of 11 Islamic Commercial Banks. Source of data obtained through secondary data. Data analysis used panel data regression with the help of Eviews 10 software. Financial Distress (Z-Score) is the dependent variable. While the Risk Profile (NPF and FDR), Good Corporate Governance (GCG), Earnings (ROA), and Capital (CAR) as independent variables. The study results show that the soundness level of Islamic commercial banks in 2013-2020 in terms of NPF is very healthy, and FDR is quite healthy. Meanwhile, GCG is in the good (healthy) category. Regarding ROA, it has decreased, so Islamic banks generating profits have decreased. Meanwhile, the CAR level has increased to a very healthy category. Partially NPF, GCG, and ROA significantly negatively affect Financial Distress. Meanwhile, FDR and CAR do not affect Financial Distress. Simultaneously NPF, FDR, GCG, ROA, and CAR significantly affect Financial Distress.

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#### INTRODUCTION

Banking in the life of a country has a vital role in advancing the country's economy and becoming one of the agents of development (Putera & SH, 2020). In Indonesia, banking is the primary need for the community to meet financial needs. Therefore, in running a banking business, one must consider the risks resulting from its operational activities. Bank health is the ability of a bank to carry out its operational activities usually and fulfill its obligations properly (Liyas, 2022). The soundness level of a bank is fundamental and influences customer trust (Quang Trinh et al., 2023). This is because the better a bank's health, the more interested customers are in saving their funds in that bank.

Islamic banking in Indonesia has become one of the fastest-growing banks. According to Banjaran Surya Indrastomo as the Chief Economist of PT Bank Syariah Indonesia (BSI), the growth of Islamic banking assets reached 12.8 percent or higher than conventional banking and the national banking industry. (Nora, 2016). In addition, the Islamic banking sector survived amid the Covid-19 pandemic crisis, as seen from the increase in business and performance and movements that tended to be stable in the capital market.

According to Agus, financial distress is when a company experiences financial difficulties and is threatened with bankruptcy (Utami, 2021). Financial distress is a signal and an early warning of the

coming bankruptcy of a company. The earlier the signs of bankruptcy are known, the better it is for management to improve (Ir Agus Zainul Arifin, 2018). From an Islamic perspective, bankruptcy is categorized in files (bankrupt), individuals whose debts are more significant than their wealth. Fiqh experts think bankruptcy is viewed through an Islamic perspective, namely when the amount of debt is greater than the assets owned. For companies that are currently operating, bankruptcy is a fatal thing. So, bankruptcy must be addressed immediately, one of which is by predicting bankruptcy so that companies can minimize the risk of bankruptcy.

Based on Law Number 21 of 2011 concerning the Financial Services Authority, as of 31 December 2013, the banking regulatory and supervisory duties were transferred from Bank Indonesia to the Financial Services Authority (Number 21 CE). This resulted in several regulations previously regulated in Bank Indonesia Regulations being converted into Financial Services Authority Regulations. Regulations regarding the Soundness Rating of Islamic Commercial Banks and Sharia Business Units are contained in POJK No. 8/POJK.03/2014, which explains that the scope of the assessment consists of four factors, namely the risk profile (Risk Profile), Good Corporate Governance (GCG), Earnings (profitability) and capital (capital) or commonly called the RGEC method.

The risk profile in this study uses Non-Performing Financing (NPF) and Financing to Deposit Ratio (FDR) proxies. NPF (Non-Performing Financing) is a ratio for assessing problem financing. In contrast, FDR (Financing to Deposit Ratio) measures a bank's ability to fulfill financing by utilizing Third Party Funds (Wasiaturrahma et al., 2020). According to previous research, weak governance is one of the causes of the economic crisis in Indonesia. Regarding the Corporate Governance mechanism, researchers will test using a Self Assessment proxy (Sarmigi & Putra, 2013).

Earnings in this study use ROA (Return on Assets) proxies. A critical indicator in achieving optimal company performance is profit. This ratio provides an overview of the level of effectiveness of company management. According to previous research, ROA measures a bank's ability to obtain profit (profit) (Saputra, 2020). Capital, in this study, uses the CAR (Capital et al.) proxy. CAR compares the ratio of capital to risk-weighted assets (Rampai, 2013).

The following research is related and can be used as a reinforcement for this condition or writing, namely, Non-Performing Financing (NPF) and FDR (Financing to Deposit Ratio) affect financial distress (Haq & Harto, 2019). Meanwhile, other research states that Non-Performing Financing (NPF) and FDR (Financing to Deposit Ratio) does not affect financial distress (Prabawati et al., 2021). Similar results were also found by Prianti and Musdholifah (2018).

Previous research suggests that Good Corporate Governance (GCG) affects financial distress (Wijayanti et al., 2018). While other research states that Good Corporate Governance does not affect financial distress (Prabawati et al., 2021). Previous research stated that Return On Assets (ROA) affected financial distress (Suhartanto et al., 2022). Meanwhile, the ROA variable in Mugiarti and Mranani's research (2019) does not affect financial distress (Mugiarti, 2019). Previous research suggested that the Capital Adequacy Ratio (CAR) affected financial distress (Mahmud & Waskito, 2021). Meanwhile, the results found by other studies state that the Capital Adequacy Ratio does not affect financial distress (Nisak, 2021).

The emergence of various bankruptcy prediction models is an anticipation and early warning system for financial distress. These models can identify and even improve conditions before and before a crisis or bankruptcy. For companies that are considered in the bankrupt category but immediately make internal improvements to the company, the company's finances may improve and become a non-bankrupt category. For this reason, this prediction also depends on the company's feedback on the results of the bankruptcy prediction. One of the bankruptcy prediction models is the Altman Z-Score model (Putra et al., 2021). In this study, the Altman Z-Score model used is a modified Altman Z-Score

model. As a result, this model can predict bankruptcy with a relatively high degree of accuracy before the company goes bankrupt.

Based on the phenomenon of Islamic banking in Indonesia, action is needed to predict the bankruptcy aspect of Islamic commercial banks in Indonesia registered with the Financial Services Authority (OJK) for the period 2013-2020 in order to determine the company's financial condition, considering its ability to maintain business continuity as an opportunity for Sharia economic growth in Indonesia. This research was conducted with the aim of understanding and analyzing the Assessment of Bank Soundness Level with the RGEC Method and its Influence on Islamic Financial Distress in Islamic Commercial Banks in Indonesia.

#### **METHODS**

Judging from the approach used, the research method used in this study uses a quantitative approach. Quantitative research is a type of research that produces data findings in the form of numbers obtained using statistical procedures or other methods of quantification (measurement). In the quantitative approach, the nature of the relationship between variables is analyzed using an objective theory.

The type of research used in this research is associative research. Associative research aims to determine the relationship between two or more variables (Jaya, 2020). The form of the relationship in this study is a clausal relationship, namely a causal relationship arising from the independent variables, namely Risk Profile, Good Corporate Governance, Earnings, and Capital, to the dependent variable, Islamic Financial Distress.

The population of this study is Islamic Commercial Banks registered with OJK, which consists of 14 Islamic Commercial Banks. At the same time, research sampling is a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a sample member (Yusuf, 2016). The sampling technique used is a purposive sampling technique, namely a sampling technique based on specific considerations.

Data collection techniques are methods used by researchers to capture or capture quantitative information from respondents according to the scope of the research. In this study, researchers used documentation, library, and observation techniques.

# RESULTS AND DISCUSSION

## **Descriptive Analysis**

Descriptive statistics provide an overview or description of data from the maximum, minimum, and standard deviation values. Descriptive statistics provide an overview of the distribution and behavior of the sample data. The variables used in this study are Non-Performing Financing (NPF), Financing to Deposit Ratio (FDR), Good Corporate Governance (GCG), Return On Assets (ROA), and Capital Adequacy Ratio (CAR). as the independent variable, and Financial Distress as the dependent variable. The results of the descriptive analysis are as follows:

**Table 1. Descriptive Statistical Test** 

	$X_1$	$X_2$	$X_3$	$X_4$	$X_5$	Y
Means	2.254659	89.03682	1.965909	0.930341	20.27375	5.796136
Median	2.220000	88.34000	2,000000	0.910000	19.13500	6.080000
Maximum	4.990000	196.7300	3,000000	5.100000	45.30000	9.680000
Minimum	0.010000	63.94000	1.000000	-10.77000	11.10000	0.760000
std. Dev.	1.608773	17.33679	0.614927	1.796887	6.846361	1.861090

Source: Data Processed by Researchers, 2023

The variable  $(X_1)$  has a mean value of 2.25 and a standard deviation of 1.60. This means that the mean value is greater than the standard deviation, indicating that the results are promising. Because the standard deviation illustrates high deviation, data that is not spread shows average and unbiased results. The minimum value  $(X_1)$  of 0.01 was found for BCA Syariah companies in 2020, and the maximum value was 4.99 for BRI Syariah companies in 2018.

The variable  $(X_2)$  has a mean value of 89.03 and a standard deviation 63.94. This means that the mean value is greater than the standard deviation, indicating that the results are promising. Because the standard deviation illustrates high deviation, data that is not spread shows average and unbiased results. The minimum value  $(X_2)$  of 63.94 was found in the Bank Mega Syariah company in 2020, and the maximum value was 196.73 in the Bank KB Bukopin Syariah company in 2020.

The variable  $(X_3)$  has a mean value of 1.96 and a standard deviation of 0.61. This means the mean value exceeds the standard deviation, indicating good results. Because the standard deviation illustrates high deviation, data that is not spread shows average and unbiased results. The minimum value  $(X_3)$  is 1 in several companies; the maximum is 3 in several companies.

The variable ( $X_4$ ) has a mean value of 0.93 and a standard deviation of -10.77. This means the mean value exceeds the standard deviation, indicating good results. Because the standard deviation illustrates high deviation, data that is not spread shows average and unbiased results. The minimum value ( $X_4$ ) of -10.77 was found in the Bank Panin Dubai Syariah company in 2017, and the maximum value was 5.1 in the BPD NTB Syariah company in 2013.

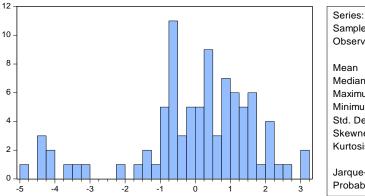
The variable (X<sub>5</sub>) has a mean value of 20.27 and a standard deviation 6.84. This means the mean value exceeds the standard deviation, indicating good results. Because the standard deviation illustrates high deviation, data that is not spread shows average and unbiased results. The minimum value (X5) of 11.10 was found for the KB Bukopin Syariah Bank company in 2013, and the maximum score was 45.3 for the BCA Syariah company in 2020.

Variable (Y) has a mean value of 5.79 and a standard deviation of 1.86. This means the mean value exceeds the standard deviation, indicating good results. Because the standard deviation illustrates high deviation, data that is not spread shows average and unbiased results. The minimum value (Y) of 0.76 was found in the NTB Syariah BPD company in 2017, and the maximum value was 9.68 in the NTB Syariah BPD company in 2019.

## **Classic Assumption Test**

## 1. Normality test

The normality test was carried out to test whether, in the regression model, the confounding or residual variables have a normal distribution or not. This study uses Eviews 10 to detect whether the residuals are normally distributed. The results of the normality test using the Jarque-Bera Test can be seen in the image below:

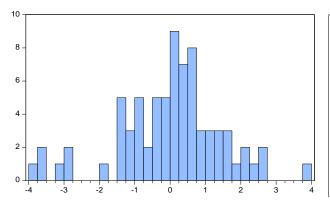


Series: Residuals Sample 188 Observations 88 -1.74e-16 Median 0.285843 3.137102 Maximum Minimum -4.825407 Std. Dev. 1.736001 Skewness -0.975372 Kurtosis 3.874994 Jarque-Bera 16.76039 Probability 0.000229

Figure 1. Normality test

Source: Eviews Output Results (Processed Data), 2023

Based on the results of the normality test above, it is known that the *probability value* is 0.0002 <0.05. So there is a problem with the normality test. To improve normality, it *is* necessary to delete data (*outliers*) that are considered to have extreme data so that the results can pass normality.



Series: Residuals			
Sample 3 88			
Observations	75		
Mean	4.06e-15		
Median	0.134058		
Maximum	3.750677		
Minimum	-3.942751		
Std. Dev.	1.476000		
Skewness	-0.500649		
Kurtosis	3.810821		
Jarque-Bera	5.187587		
Probability	0.074736		

Figure 2. Improved Normality Test

Source: Eviews Output Results (Processed Data), 2023

Based on the image above, after the outlier is done, it is known that the probability value is 0.0747> 0.05. So there are no symptoms of normality in this study. The picture above shows that the number of sample data used is 75 from 88 samples of previous data. The data reduction was due to the outlier data released in the study. So that for further research, it will use 75 sample data.

## 2. Multicollinearity Test

The multicollinearity test tests whether the regression model found a correlation between independent (independent) variables. A good regression model should not correlate with the independent variables. Based on the data processing performed, the following results are obtained:

**Table 2. Multicollinearity Test** 

Variance Inflation Factors Date: 02/15/23 Time: 20:12

Samples: 1 88

Included observations: 75

	coefficient	Uncentered	Centered
Variables	Variances	VIF	VIF
C	4.014085	128.8524	NA
X1	0.036405	8.310961	2.702797
X2	0.000369	88.44922	1.087436

Variance Inflation Factors						
Date: 02/15/23 Time: 20:12	Date: 02/15/23 Time: 20:12					
Samples: 1 88						
Included observations: 75						
X3	0.130894	17.42305	1.281799			
X4	0.047201	3.679862	2.155811			
	0.004.00					

Source: Eviews Output Results (Processed Data), 2023

From the results of the table above, it can be concluded that all the independent variables used in the equation are free from multicollinearity problems because all the variables used in this study have a VIF value of <10, which means that the data used for the study do not experience multicollinearity.

## 3. Heteroscedasticity Test

The heteroscedasticity test aims to test whether, in the regression model, there is an inequality of variance from the residuals of one observation to another. Suppose the variance from the residual observation to other observations remains. In that case, it is called homoscedasticity, and if the variance is not constant or changes, it is called heteroscedasticity. A good regression model is homoscedasticity, or there is no heteroscedasticity.

**Table 3. Heteroscedasticity Test** 

Test Equation:
Dependent Variable: LRESID2
Method: Least Squares
Date: 02/15/23 Time: 20:13

Samples: 3 88

Included observations: 75

Variables	coefficient	std. Error	t-Statistics	Prob.
C	-6.856322	2.849771	-2.405921	0.0188
X1	-0.368449	0.271392	-1.357624	0.1790
X2	0.048716	0.027327	1.782668	0.0790
X3	0.337196	0.514608	0.655249	0.5145
X4	0.229733	0.309023	0.743415	0.4598
X5	0.085638	0.054903	1.559795	0.1234

Source: Eviews Output Results (Processed Data), 2023

Based on the table above using the heteroscedasticity test, the probability values for all research variables are above 0.05. So, in this study, there was no heteroscedasticity problem because the Sig value > 0.05.

## 4. Autocorrelation Test

This test determines whether there is a deviation from the classic autocorrelation assumption, namely the correlation between the residuals in the i-th and k-th observations. A good regression model is a regression that is free from autocorrelation.

Table 4. Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:					
F-statistics	0.985172	Prob. F(2,67)	0.3787		
Obs*R-squared2.142598Prob. Chi-Square(2)0.3426					

Source: Eviews Output Results (Processed Data), 2023

Based on the table above, it is known that the value of Prob. F is 0.3787 > 0.05, so the autocorrelation test has no symptoms or problems.

# **Panel Data Regression Model Selection Test**

#### 1. Chow test

The Chow test or Chow test is a test to determine the most appropriate Common Effect or Fixed Effect model used in estimating panel data. The hypothesis in the Chow test is:

H0: Common Effect Model or pooled OLS

Ha: Fixed Effects Model

Table 5. Chow test

Redundant Fixed Effects Tests					
Equation: Untitled	Equation: Untitled				
Test cross-section fixed effects	Test cross-section fixed effects				
Effect Test	Statistics	df	Prob.		
Cross-section F	2.074954	(10.59)	0.0411		
Chi-square cross-sections	22.601516	10	0.0123		

Source: Eviews Output Results (Processed Data), 2023

Based on the results of the Chow test using Eviews 10, a probability value of 0.0411 is obtained. This shows that the probability value is smaller than the significance level (0.05), then H0 for this model is rejected. Ha is accepted, so a better estimate is used using the Fixed Effect Model (FEM) method, then proceed to the Hausman test.

#### 2. Hausman test

The Hausman test is a statistical test to choose whether the fixed effect or random effect model is the most appropriate. Suppose the Hausman statistical value is less than the critical value (0.05). In that case, Ha is accepted (the correct model is the fixed effect model) and vice versa. The hypothesis put forward is as follows:

H0: Random Effects Model Ha: Fixed Effects Model

From the results of the model analysis using the Hausman test, the following results are obtained:

Table 6. Hausman test

	Table 0. Hausilian te	<b>5</b> t			
Correlated Random Effects -	Correlated Random Effects - Hausman Test				
Equation: Untitled	Equation: Untitled				
Test cross-section random effects					
Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.		
Random cross-sections	7.021571	5	0.2190		

Source: Eviews Output Results (Processed Data), 2023

Based on the results of the Hausman test using Eviews 10, a probability of 0.2190 is obtained, indicating that the probability value is greater than the significance level (0.05) so that it can be concluded that H0 for this model is accepted and Ha is rejected. The appropriate estimation model used is the Random Effect Model (REM). Because there are differences in the model used from the results of the Chow and Hausman tests, it is necessary to carry out the Lagrange Multiplier test.

# 3. Lagrange Multiplier Test (LM)

The Lagrange Multiplier test determines the model for panel data regression analysis. The hypothesis put forward is as follows:

H0: Common Effect Model Ha: Random Effects Model

**Table 7. Lagrange Multiplier Test** 

Lagrange multiplier (LM) test for panel data

Date: 02/15/23 Time: 20:02

Sample: 2013 2020

Total panel observations: 75

probability in()

productinty in()			
Null (no rand. effect)	Cross-section	period	Both
Alternatives	One-sided	One-sided	
Breusch-Pagan	0.198614	1.078639	1.277253
	(0.6558)	(0.2990)	(0.2584)
Honda	0.445661	-1.038575	-0.419254
	(0.3279)	(0.8505)	(0.6625)
King-Wu	0.445661	-1.038575	-0.510244
	(0.3279)	(0.8505)	(0.6951)
GM			0.198614
			(0.5543)

Source: Eviews Output Results (Processed Data), 2023

Based on the output results above, it is known that the Breusch-Pagan probability value is 0.6558 > 0.05. Then H0 is rejected, and Ha is accepted, so the suitable model for the following analysis is the Common Effect Model (CEM).

## **Panel Data Regression Analysis**

This analysis is used to see the effect of the independent variable on the dependent variable in the form of panel data which consists of a combination of time series and cross-section data. Using panel regression estimation with the Common Effect Model (CEM) approach. The estimation results using Eviews 10 are as follows:

**Table 8. Panel Data Regression Model Test Results** 

Dependent Variable: Y Method: Panel Least Squares Date: 02/15/23 Time: 20:19 Sample: 2013 2020 The period included: 8 Cross-sections included: 11

Total panel (unbalanced) observations: 75

Total panel (anothered	) observations. 75			
Variables	coefficient	std. Error	t-Statistics	Prob.
C	10.45591	2.003518	5.218774	0.0000
X1	-0.390736	0.190801	-2.047871	0.0444
X2	-0.002909	0.019212	-0.151420	0.8801
X3	-0.869143	0.361793	-2.402324	0.0190
X4	-0.934342	0.217258	-4.300621	0.0001
X5	-0.045664	0.038599	-1.183031	0.2409
R-squared	0.309080	Mean dependent var		5.807733
Adjusted R-squared	0.259013	SD deper	ndent var	1.775711
SE of regression	1.528543	Akaike inf	fo criterion	3.763125
Sum squared residue	161.2146	Schwarz	criterion	3.948524
Likelihood logs	-135.1172	Hannan-Qu	inn criteria.	3.837153
F-statistics	6.173357	Durbin-W	Vatson stat	1.528445
Prob(F-statistic)	0.000087			

Source: Eviews Output Results (Processed Data), 2023

The results of the equation from the table above are:

$$Y = \alpha + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + e$$

$$Y = 10.45 - 0.39 X1 - 0.002 X2 - 0.86 X3 - 0.93 X4 - 0.04 X5 + e$$

#### Information:

Y = Financial Distress

 $\alpha$  = Constant

 $\beta_1$  = Variable Coefficient

 $X_1$  = Non-Performing Financing

 $X_2$  = Financing to Deposit Ratio

 $X_3$  = Good Corporate Governance

 $X_4$  = Return On Assets

X<sub>5</sub> = Capital Adequacy Ratio

 $\varepsilon = \text{Error Term}$ 

From the equation above, it can be explained that:

- a. A constant value of 10.45 indicates that if the dependent variable is Financial Distress is zero, then Financial Distress is a constant of 10.45%.
- b. The coefficient value of Non-Performing Financing of -0.39 indicates that a decrease in Non-Performing Financing in one unit number will decrease Financial Distress by -0.39% per unit, assuming other variables are constant.
- c. The coefficient value of the Financing to Deposit Ratio of -0.002 indicates that a decrease in the Financing to Deposit Ratio in one unit number will decrease Financial Distress by -0.002% per unit, assuming other variables are constant.
- d. A good Corporate Governance coefficient value of -0.86 indicates that a decrease in Good Corporate Governance in one unit number will decrease Financial Distress by -0.86% per unit, assuming other variables are constant.
- e. The coefficient value Return On Assets of -0.93 indicates that a decrease in Return On Assets in one unit number will decrease Financial Distress by -0.93% per unit, assuming other variables are constant.
- f. The capital Adequacy Ratio coefficient value of -0.04 indicates that the decline in Capital Adequacy Ratio in one unit of numbers will result in a decrease in Financial Distress of -0.04% unit, assuming other variables are constant.

## Hypothesis test

# 1. T-test

The decision to reject or accept the hypothesis with the amount of data is 75 and with a significance level of 5% with the formula t table =  $t(\alpha/2;nk-1) = t(0.05/2;75 -5 -1) = (0.025;69)$  so that the t-table value in data 69 is 1.9949 based on the following criteria.

Based on the comparison of the values of  $t_{count}$  and  $t_{table}$  the basis for the decision is:

- 1) If  $t_{\text{count}}$ <, then H0 is accepted, and Ha is rejected (no effect).
- 2) If  $t_{\text{count}}$ >, then H0 is rejected, and Ha is accepted (there is influence).

So, the results of the hypothesis from Table 4.9 include the following:

- 1) There is a significant negative effect of the variable Non-Performing Financing  $(X_1)$  on Financial Distress (Y) because the Prob value is 0.0444 <0.05. So that there is an influence between the variable  $X_1$  on Y, or in other words,  $H_0$  is rejected, and  $H_0$  is accepted.
- 2) There is no effect of the Financing to Deposit Ratio ( $X_2$ ) variable on Financial Distress (Y) because the Prob value is 0.8801 > 0.05. So that there is no influence between variable X2 on Y, or in other words,  $H_0$  is accepted, and Ha is rejected.

- 3) There is a significant negative effect of the variable Good Corporate Governance  $(X_3)$  on Financial Distress (Y) because the Prob value is 0.0190 <0.05. So that there is an influence between the variable  $X_3$  on Y, or in other words,  $H_0$  is rejected, and  $H_0$  is accepted.
- 4) There is a significant adverse effect on the variable Return On Assets ( $X_4$ ) on Financial Distress (Y) because the Prob value is 0.0001 <0.05. So that there is an influence between the variable  $X_4$  on Y, or in other words,  $H_0$  is rejected, and  $H_0$  is accepted.
- 5) There is no effect of the Capital Adequacy Ratio variable  $(X_5)$  on Financial Distress (Y) because the Prob value is 0.2409 > 0.05. So that there is no influence between the variable  $X_5$  on Y, or in other words,  $H_0$  is accepted, and  $H_0$  is rejected.

## 2. F test

Eviews data processing on the F test is to see whether or not there is an influence of the independent variables on the dependent variable and to test whether the model used is fixed or not. The data processing results in Table 8 above show a significant value at 0.0000 (Sig 0.0000 < 0.05). This means indicating that the regression equation obtained is reliable or the model used is fixed, so this means that the variables  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$ , and  $X_5$  can explain the dependent variable (Y) together or there is a simultaneous influence of the independent variable on the variable dependent.

#### 3. Determination Coefficient Test (R<sup>2</sup>)

The coefficient of determination aims to see or measure how far the model's ability to explain the dependent variable is. From the output display Eviews 10 in Table 8 above, the magnitude of R Square is 0.2590. This indicates that the contribution of the independent variable to the dependent variable is 25.90%. In comparison, the remaining 74.1% (100-25.90) is determined by other factors outside the model which were not detected in this study.

# Soundness Level of Islamic Commercial Banks in Indonesia Based on RGEC with the Z-Score Model in the Perception of Islamic Maqashid

This study measures the soundness of Islamic Commercial Banks using the RGEC (Risk et al., Earnings, and Capital) method. Where in measuring the Risk Profile using Non-Performing Financing (NPF) and Financing to Deposit Ratio (FDR) proxies. Non-Performing Financing (NPF) is an indicator of the health of the quality of a bank's assets; the higher the NPF value (above 5%), the bank is unhealthy (Z., 2012). Table 2 shows that the average NPF of Islamic Commercial Banks in the 2013-2020 period is categorized as very healthy. This shows at least bad credit and problematic financing by customers at Islamic banks. The category of all banks is still in the very healthy category, which is interpreted as being in a safe position because the NPF value of each Islamic Commercial Bank shows results of less than 5%.

Apart from Non-Performing Financing (NPF), the Risk Profile is also proxied using the Financing to Deposit Ratio (FDR). This ratio indicates the health of bank liquidity (Z., 2012). Based on Table 2, it is concluded that the average FDR of Islamic Commercial Banks in the 2013-2020 period is categorized as relatively healthy, meaning that the bank, in fulfilling its short-term obligations and collecting third-party funds, is in a reasonably good category.

Good Corporate Governance (GCG) is a system that manages and controls companies to create added value for stakeholders (Faridah et al., 2023). Table 2 shows that the average GCG of Islamic Commercial Banks in 2013-2020 is categorized as good (healthy). This reflects that Islamic Commercial Banks fulfill and are adequate to Good Corporate Governance (GCG) principles. If there are weaknesses in applying the principles of Good Corporate Governance (GCG), then in general, these weaknesses are less significant and can be resolved by everyday actions by Islamic bank management.

Earnings are proxied using Return On Assets (ROA), where ROA is the ratio used to measure the ability of bank management to gain overall profit (profit). The greater the ROA of a bank, the greater

the level of profit the bank achieves and the better the bank's position in terms of asset use. Based on Table 2, the average ROA of Islamic Commercial Banks in the 2013-2020 period is categorized as relatively healthy because changes in ROA for each bank vary. The higher the ROA means that the bank can use its assets well to earn profits and vice versa.

Capital is proxied using the Capital Adequacy Ratio (CAR). The higher the Capital Adequacy Ratio (CAR), the better the bank's performance because with sufficient CAR, the bank can operate can generate profits. Table 2 shows that the average CAR of Islamic Commercial Banks in the 2013-2020 period is categorized as very healthy. This shows that Islamic Commercial Banks have a higher level of capital, are adequate, and can anticipate all the risks faced and support the expansion of business banks forward.

The purpose of maqasid Sharia is to maintain maslahah or suitable for the public interest and the company, which means the company can generate profits. For the company to fulfill its obligations in realizing profits for the public interest, it must maintain its financial condition healthy, without the potential for bankruptcy. This can be realized by anticipating bankruptcy prediction using one of the methods, the Altman Z-Score. By predicting bankruptcy, the goal of maqashid Sharia in maintaining the company's survival (going concerned) can be achieved.

## Effect of Risk Profile on Financial Distress in Islamic Commercial Banks in Indonesia

This study shows that the Risk Profile proxied by Non-Performing Financing (NPF) significantly negatively affects Financial Distress. The higher the NPF value, the poorer the quality of the bank's financing and the potential for bankruptcy. The low NPF value can be caused by Islamic Commercial Banks being able to provide financing using the precautionary principle before providing financing and restructuring financing if there are obstacles in repayment.

The results of this study are supported by the existing theory that a high NPF can reduce the level of profitability so that it affects the ability of banks to expand their financing business, and financing performance will decrease (Z., 2012). In addition, this study aligns with previous studies, which stated that the Risk Profile variable proxied by Non-Performing Financing (NPF) had a significant adverse effect on Financial Distress. In contrast, the results of previous research conducted by Wahyuni stated that Non-Performing Financing (NPF) significantly negatively affects Financial Distress. That way, the two studies produce the same decision: the Risk Profile variable proxied by Non-Performing Financing (NPF) significantly negatively affects Financial Distress in Islamic Commercial Banks in Indonesia.

The Risk Profile is also proxied from NPF using the Financing to Deposit Ratio (FDR). This ratio measures a bank's ability to fulfill financing by utilizing Third Party Funds (DPK). If the bank cannot distribute financing and many funds are collected, the bank will suffer losses (Hasibuan et al., 2020). However, this study does not strengthen the existing theory. Based on the tests that have been carried out, it is found that FDR has no effect on Financial Distress.

This shows that the amount or amount of funds channeled by banks to the public does not affect the possibility of banks experiencing financial distress. The amount of FDR disbursed indicates that the bank's management can market good funds, but this cannot reflect the low probability of Islamic Commercial Banks experiencing financial distress. Islamic Commercial Banks have sufficient liquidity capacity to fulfill bank obligations so that FDR does not affect financial distress.

This study's results align with previous studies, which stated that the Risk Profile variable proxied by the Financing to Deposit Ratio (FDR) did not affect Financial Distress. In contrast, the results of previous studies stated that the Financing to Deposit Ratio (FDR) did not affect the probability of occurrence of banking distress (financial distress) (Prianti & Musdholifah, 2018). That way, the two

studies produce the same decision; namely, the Risk Profile variable proxied by FDR does not affect Financial Distress at Islamic Commercial Banks in Indonesia.

# The Influence of Good Corporate Governance (GCG) on Financial Distress in Islamic Commercial Banks in Indonesia

Good corporate governance (GCG) is the structure and mechanism that regulates the company's management to produce sustainable long-term economic value for shareholders and stakeholders. This study shows that Good Corporate Governance significantly negatively affects Financial Distress. These results illustrate that the better the implementation of corporate governance, the less financial distress can be. Conversely, if the implementation of corporate governance worsens, it will increase the possibility that the company or bank will experience financial distress. This is supported by the statement that one of the causes of financial distress can be seen in the form of corporate governance that is not managed correctly (Hutabarat, 2020).

This study's results align with previous research, which stated that Good Corporate Governance (GCG) had a significant adverse effect on Financial Distress. In contrast, the results of previous research conducted by Mahmud, Handajani, and Waskito stated that Good Corporate Governance (GCG) had a negative effect significant impact on Financial Distress (Prianti & Musdholifah, 2018). In this way, the two studies make the same decision: Good Corporate Governance (GCG) has a significant negative effect on Financial Distress in Islamic Commercial Banks in Indonesia.

# The Effect of Earnings on Financial Distress in Islamic Commercial Banks in Indonesia

Earnings are proxied using Return on Assets (ROA). This ratio is a comparison of net income to total assets. The higher the ROA value, the higher the profit generated (Fauziah, 2017). This study shows that ROA has a significant negative effect on Financial Distress. This shows that the company has implemented asset effectiveness in obtaining profits that can be used to fund its operational activities so that the company has a slight (negative) possibility of experiencing financial distress.

This study's results align with previous research, which stated that the Earnings variable proxied by Return on Assets (ROA) significantly adversely affected Financial Distress (Yuliani & Haryati, 2023). Meanwhile, the results of previous studies state that Return on Assets (ROA) has a significant negative effect on Financial Distress (Mahmud & Waskito, 2021). That way, the two studies produce the same decision: the Earnings variable proxied by Return on Assets (ROA) has a significant negative effect on Financial Distress, in Islamic Commercial Banks in Indonesia.

## The Effect of Capital on Financial Distress in Islamic Commercial Banks in Indonesia

Capital is proxied using the Capital Adequacy Ratio (CAR). This ratio indicates a bank's ability to cover declining assets due to losses on bank assets using its capital (Siswanti et al., 2020). This study found that CAR does not affect Financial Distress. These results indicate that an increase in CAR does not affect the possibility of a company experiencing financial distress, which means that the bank's ability to cover its risky assets is good. Additional capital makes the bank's capital sufficient. It supports assets that contain or generate risk so that it does not affect financial distress.

The results of this study strengthen the existing theory, in which one of the factors of financial distress is a lack of working capital (Hery & Si, 2017). Based on the research results above, CAR in Islamic Commercial Banks is in a very healthy category, so CAR does not affect financial distress. This research is also in line with previous research, which stated that the variable capital proxied by the Capital Adequacy Ratio (CAR) did not significantly affect Financial Distress. In contrast, the results of previous studies stated that the Capital Adequacy Ratio (CAR) did not significantly affect Financial Distress. Distress (Nisak, 2021). That way, the two studies produce the same decision, namely, the variable capital, which is proxied by the Capital Adequacy Ratio (CAR), does not significantly affect Financial Distress, in Islamic Commercial Banks in Indonesia.

# The Effect of Risk Profile, Good Corporate Governance, Earnings and Capital (RGEC) on Financial Distress in Islamic Commercial Banks in Indonesia

Based on the study's results, the effect of Risk Profile, Good Corporate Governance, Earnings, and Capital proxied by NPF, FDR, GCG, ROA, and CAR simultaneously significantly influences Financial Distress in Islamic Commercial Banks in Indonesia. The results of this study show that the influence of the five factors measured, namely NPF, FDR, GCG, ROA, and CAR, can change the condition of Financial Distress in Islamic Commercial Banks in Indonesia. Financial and non-financial distress conditions depend on the high or low value of NPF, FDR, GCG, ROA, and CAR. In addition, if Islamic banks can maintain their health, then the bank's performance will automatically be good so that the bank can avoid financial distress.

The results of this study are in line with previous research, which stated in this study that the assessment of the soundness level of a bank using the RGEC method, which was proxied by NPF, FDR, GCG, ROA, and CAR simultaneously, had a significant effect on Financial Distress. In contrast, the results of previous research conducted by Ermar and Suhono stated that the soundness level of a bank using the RGEC method, which is proxied by NPL, LDR, GCG, ROA, and CAR, simultaneously has a significant effect on Financial Distress (Prabawati et al., 2021). In this way, the two studies produce the same decision, namely the assessment of the soundness of a bank using the RGEC method, which is proxied by NPF, FDR, GCG, ROA, and CAR, which simultaneously have a significant effect on Financial Distress at Islamic Commercial Banks in Indonesia.

#### **CONCLUSION**

In conclusion, the assessment of the soundness of Islamic commercial banks in Indonesia using the RGEC method reveals positive results. The banks demonstrate healthy levels of risk profile, as indicated by low NPF and relatively healthy FDR values. The implementation of Good Corporate Governance (GCG) principles is satisfactory, contributing to lower financial distress. Earnings, represented by ROA, are relatively healthy, indicating sufficient profitability. Capital, proxied by CAR, is at a very healthy level, supporting the bank's ability to manage risks and expand its business.

The perception of maqashid Sharia aligns with the goal of bankruptcy prediction, emphasizing the importance of maintaining the benefit and preventing harm. The analysis highlights the significance of risk profile, GCG, earnings, and capital in influencing financial distress. Effective risk management, strong corporate governance practices, and profitability contribute to reducing the likelihood of financial distress in Islamic commercial banks.

Overall, the findings emphasize the importance of maintaining a healthy financial position and implementing robust risk management practices to ensure the stability and resilience of Islamic commercial banks in Indonesia.

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