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Financial Distress on Islamic Banks in Indonesia Impact of Covid 19 and Recession

Shafitranata Shafitranata[1*], Ria Octavia[2]
Sekolah Tinggi Ilmu Ekonomi Al-Madani, Lampung[1,2]
shafitranata@almadani.ac.id[1*], ria.octavia@almadani.ac.id[2]

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Abstract

Purpose: The aim of this research is to identify and analyze the financial distress of Islamic banks in Indonesia during the pandemic and economic recession through an assessment of NPF, FDR, GCG, ROA, CAR, bank size, inflation, and interest rates. This research uses Islamic bank panel data for 2018-2022 and is quantitative research.

Methodology/approach: Data analysis using Stata 17, through panel data regression and the data analysis method in this study using Ordinary Least Square (OLS). Population of this research is 10 Islamic banks in Indonesia with a total observation of 50 firm-years and the data used are secondary data of annual reports of Islamic banks.

Results/findings: The findings show that the financial distress of Islamic banks is influenced by FDR, ROA, and CAR, and is not influenced by NPF, GCG, bank size, inflation, and interest rates. Islamic banks must carry out efficiency, restructuring, and manage the capital adequacy ratio so that it does not have an impact on the company's financial performance.

Conclusions: The financial distress in Islamic banks in Indonesia during the COVID-19 pandemic and economic recession is significantly affected by the Financing to Deposit Ratio (FDR), Return on Assets (ROA), and Capital Adequacy Ratio (CAR).

Limitations: The limitations of the study are that the sector studied is only Islamic banks in Indonesia so that the variables that influence are not comprehensive, allowing other variables to play a role in the financial distress of Islamic banks in Indonesia.

Contribution: This research contributes by analyzing the performance of Islamic banks in Indonesia during the COVID-19 pandemic and in the face of economic recession. The widespread impact across various sectors, particularly the financial sector, underscores the need for government support through policies and regulations to ensure the stability of Islamic banks.

Keywords: *Covid 19 Pandemic, Economic Recession, Financial Distress.*

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1. Introduction

The World Health Organization (WHO) has officially declared the end of the COVID-19 pandemic status, and the Indonesian government has lifted restrictions on social activities. The declaration of this status is good news for the public, even the Minister of Finance predicts that economic growth will increase by 5% after the Covid 19 pandemic. Unfortunately, this good news will disappear when the economic storm reappears, the economic recession. World Bank identifies the occurrence of a global economic recession in 2023 and has impacted the banking sector. Indications of an economic recession are Bank Indonesia raising the benchmark interest rate aggressively in hopes of anticipating inflation (Ismaulina, 2020).

Based on the Financial Services Authority Mahdiyan & Ismayati (2023), a recession is a condition of decreasing a country's economy, GDP tends to be negative, high unemployment, and two quarters of negative real sector growth. Indicators of global economic recession triggers are first Covid 19 pandemic, causing global economic activity to decline dramatically and several countries focused on protecting food products in anticipation for food availability and the Covid 19 disease outbreak. Second, the Russia-Ukraine conflict has led to a loss of up to USD 2.8 trillion in global GDP, disrupted global supply chains, and triggered crises in the food and energy sectors, ultimately driving inflation rates higher. Third, Bank Indonesia projects that Indonesia's inflation rate will decrease, returning to 3.0±1% in 2023 and 2.5±1% in 2024. This situation has prompted several countries to roll back monetary and fiscal incentives to mitigate the risk of rising inflation. Fourth, there has been an increase in policy interest rates.

Pandemic Covid 19 and economic recession greatly affect banking activities, especially in Islamic banks. This is in line with Regulation (POJK No.12/POJK.03/2020, 2020) on the Consolidation of Commercial Banks, which mandates that all commercial banks must fulfill a core capital requirement of Rp3 trillion by the deadline of December 31, 2022. Banks that do not have minimum core capital can be consolidated through acquisition, merger, consolidation, takeover, integration, or conversion. Providing minimum core capital is an obstacle for several Islamic banks. Based on CNBC Indonesia's search in the third quarter of 2022 (Hidayah, 2022), Islamic banks that have not achieved the minimum core capital requirements are Bank Aladin Syariah Tbk (Rp2.009 T), Bank Victoria Syariah (Rp265.7 M), Bank BCA Syariah (Rp2.844 T), PT Bank Bukopin Syariah (Rp1.109 T), and Bank Panin Dubai Syariah Tbk (2.201 T). Out of the 14 Islamic banks in Indonesia, 5 Islamic banks have not complied with the minimum core capital of IDR 3 trillion, indicating financial distress for some Islamic banks in Indonesia.

Financial distress is an indicator of financial decline before bankruptcy or bankruptcy, in terms of anticipating bankruptcy, it is necessary to analyze the company's financial distress level as a way of identifying symptoms of financial difficulties. Some research related to financial distress in Islamic banks in Indonesia includes (T. Budiman et al., 2017), (Laila, 2017), (Nugroho et al., 2020), (Yunita, 2020) conducted before the covid 19 pandemic and economic recession fluctuation. This research was conducted during the periods preceding the pandemic, throughout the pandemic, and as discussions surrounding the economic recession began to surface, using secondary data spanning from 2018 to 2022.

This research provides information to Islamic banks in anticipating the possibility of financial distress that will affect company performance. At present, Islamic banking is growing rapidly in Indonesia, this development needs to be balanced by anticipating the health, effectiveness, and efficiency factors of the company through this research. Another key contribution of this research lies in identifying factors that significantly influence the financial distress of Islamic banks, namely Financing to Deposit Ratio (FDR), Return on Assets (ROA), and Capital Adequacy Ratio (CAR).

2. Literature review and hypothesis/es development

2.1 Financial Distress Theory

Financial distress theory explains the company's condition towards the fulfillment of financial liabilities, including short, medium and long term, as well as the company's capacity to manage the company's assets in order to avoid financial difficulties. According to Prasad & Singh (2021) financial distress is a condition of business failures that occur in various ways. One of them is economic disruptions that occur when the company is unable to generate income, which will be sufficient to cover operating costs and obligations to creditors. (Kanoujiya et al., 2022) identified Financial Distress is a crucial problem that must be addressed urgently. Unless it is controlled, it has a systematic impact on the company, even society. A suitable model for analyzing financial distress in banking companies is the Altman Z-Score model (Ullah et al., 2021). The Altman Z-Score model works with high accuracy and is suitable for predicting the financial distress and stability of banking sector.

Financial distress is a condition in which a company experiences significant financial difficulties, usually characterized by the inability to meet short-term obligations such as debt (Aditia et al., 2022), (L. S. Budiman, 2023), (Kristianti & Herawaty, 2023). This condition is often an early stage before bankruptcy, which can be triggered by various factors, including poor corporate governance, decreased liquidity, and operational inefficiencies (Ananda et al., 2024). Studies show that the implementation of Good Corporate Governance (GCG) can minimize the potential for agency conflicts and reduce the risk of financial distress through better monitoring mechanisms and efficient management (Manan & Hasnawati, 2022).

2.2 Economic Recession

A recession is characterized by a substantial decline in economic activity spanning various sectors of the economy over a specific period, as reflected in indicators such as production, employment, real income, and other economic metrics. Decreased economic activity is characterized by a unique Covid 19, thus destroying the origin of the economy (Borio, 2020). Several countries have set policy directions in the face of the pandemic, giving rise to the unprecedented goal of combining monetary, fiscal and prudential policies. Effective ways for companies to deal with economic recession through the adaptation of crisis management systems, thereby knowing the changes and relationships so as to consider the company's operational activities (Anikina et al., 2019).

2.3 Non-Performing Financing (NPF)

Increasing non-performing financing in banking has the potential to reduce the quality of loans and company capital (Wijana & Widnyana, 2022). The highest number of non-performing financing further erodes asset quality, profitability, and the possibility of financial distress. NPF indicates the increasing ratio of the company and affects financial distress of Islamic commercial banks (Zen et al., 2022). One of the critical factors contributing to banking distress in the Middle East and Africa is the management of non-performing loans (Jabbouri & Naili, 2019). The emergence of non-performing loans forces banks to set aside assets, which affects their profitability and leads to financial difficulties. H1: Non-performing financing has a positive effect on the financial distress of Islamic banks.

2.4 Financing to Deposit Ratio (FDR)

Liquidity ratios are preferred over capital ratios, by tightening liquidity criteria to decrease the occurrence of systemic impacts without interrupting consumption growth (Feng et al., 2022). Based on Asutay & Othman (2020), the FDR variable is used to explain financial conditions, predict failures, and evaluate company performance. If the FDR variable is positive, it indicates that the company is facing financial distress, leading to poor liquidity management by the bank. With low liquidity, the total financing will decline, reducing the risk of financial distress for the company. H2: The Financing to Deposit Ratio has a positive effect on the financial distress of Islamic banks.

2.5 Good Corporate Governance (GCG)

Based on POJK No 29/POJK.05/2020 (2020) states the assessment of a company's low composite shows that GCG management and implementation are good, the higher the GCG composite value obtained, the worse the management applies GCG principles. Bad management of the company's GCG will decrease public trust and affect sales and potentially lead to the risk of the company's financial distress. Implementation of the GCG system is an estimation of the risks that arise against competent and professional management of the company's management. According to (Polyzos et al., 2018) the risk estimation model is a determining factor for the company's survival in stress testing conditions, the results research regarding banking supervision and regulation in the Eurozone are determined by good corporate management policies. Younas et al., (2021) identified the positive impact of GCG on the risk of corporate financial distress, the positive coefficient of GCG assessment serves to mitigate the risk of financial distress and the negative impact of monopoly decisions shows that companies are concentrated to protect their interests so that it affects the company's financial distress. H3: Good Corporate Governance has a positive impact on the financial distress of Islamic banks

2.6 Return on Assets (ROA)

In much of the literature, bank profitability is often assessed using Return on Assets (ROA), which serves as a function of various determinants (Setyawati et al., 2017). ROA measures a company's profit relative to its assets and is also used to evaluate management's ability to utilize resources and investments effectively to generate profits. Research by (Ebenezer et al., 2019) suggests that liquidity management and excessive lending activities can increase asset returns. The potential for financial distress is influenced by ROA levels; a low ROA ratio tends to heighten financial distress, while a high ROA value boosts income and helps prevent financial distress. Several studies use the ROA ratio to assess company profitability through asset management (Lorenza et al., 2022). H4: Return on Assets has a positive effect on the financial distress of Islamic banks.

2.7 Capital Adequacy Ratio (CAR)

CAR is a measurement of capital adequacy used to measure the efficiency and stability of the company's financial system. Adequacy of this ratio can increase profits and minimize losses and financial distress (Sutrisno et al., 2020). One of the indicators of bank health is through the calculation of the CAR ratio, this measurement can identify financial distress by observing high capital which means low credit. The results of measuring this ratio can provide information and signals to investors and / or external parties that company conditions are healthy and can invest their funds in the company. The increasing trust of customers or consumers has an impact on the company's capital adequacy, so that capital increases and can avoid the risk of financial distress. H5: Capital Adequacy Ratio has a positive impact on financial distress of Islamic banks.

2.8 Bank Size

Company size is typically measured by asset ownership, often referred to as bank size. Larger assets indicate the company's ability to maintain continuous operations, reducing the risks of cash shortages, financial distress, and potential bankruptcy. Government policies on asset ownership influence company management criteria, while the added impact of the COVID-19 pandemic has exacerbated financial distress within the business sector (Greenwood et al., 2020). Some companies may survive, while others could face bankruptcy and require liquidation. Many surviving companies may need to downsize or be acquired, so high asset quality is believed to help avoid these negative outcomes. H6: Bank Size has a positive effect on the financial distress of Islamic banks.

2.9 Inflation

Inflation refers to the rise in the overall prices of goods and services, which increases the cost of living in a country. Price hikes in banks affect the company’s return on assets, and some companies respond to inflation through strategies like credit restructuring (Hasan, 2020). Chomicz-Grabowska, (2019) highlighted the relationship between financial market risk and inflation, suggesting that market risk plays a significant role in macroeconomic modeling and forecasting, helping to reduce financial difficulties for companies. Inflationary conditions lead to a decline in people's income, prompting them to withdraw funds from banks and save privately. As a result, company funds decrease, leading to bad debts and an increased risk of financial distress. H7: Inflation has a positive effect on the financial distress of Islamic banks.

2.10 Interest Rate

The interest rate is an important element in a financial sector. Definitionally, the interest rate is set by the central bank and implemented by the parent bank in providing loans/credit to customers. The increase in interest rates affects the return on banking funds which has an impact on reducing company profits. Market risk, according to Ebenezer et al., (2019), cannot be diversified in its entirety. Interest rates and the relative value of currencies are market risks that concern banks. Most banks prefer to measure corporate risk against interest rates and track interest rate risk closely. As such, market risk remains even though the bank has exposure to a variety of financial risks. Market risk is a trigger for other financial risks that can affect a bank's financial performance.

Interest rates can be adjusted at different intervals, exposing banks to interest rate risk, which arises from mismatches between assets and liabilities in relation to changes in benchmark interest rates,

ultimately affecting banks' net interest income (Aruwa & Musa, 2014). Following the global financial crisis, many banks in emerging and developing economies adopted a new approach to address recurring mismatches between assets and liabilities, leading to the implementation of interest rate risk hedging strategies. Banks are vulnerable to both pricing risk and yield risk when interest rates are rigid, especially when they borrow short-term and lend long-term. H8: Interest Rate has a positive effect on the financial distress of Islamic banks.

Based on the theory and hypothesis, the research model is presented in Figure 1.

Figure 1. Research Model
Source: Personal Research

3. Methodology

3.1 Population and Sample

Taking samples of this research using purposive sampling, by selecting samples based on characteristics that are compatible with the research (Zikmund et al., 2013). Populations or samples of this research were selected based on the following criteria: Islamic commercial banks listed at Bank Indonesia from 2018 to 2022; Have annual reports for the period 2018 to 2022; According to the results of the research sample screening, all Islamic banks are produced according to the criteria and according to the saturated sample category. Islamic banking companies were selected as samples/populations in this research because they experienced fluctuations in company assets.

Table 1. Measurements of Research Variables

Variabels	Operational Definitions
NPF	Non-performing Financing/Total Financing
FDR	Total Financing/Total Funds
GCG	Good Corporate Governance score: shareholder rights (subindex A), boards of directors (subindex B), outside directors (subindex C), audit committee and internal auditor (subindex D), disclosure to investors (subindex E)
ROA	Earnings Before Tax and Interest/Total Assets
CAR	Capital/Risk Weighted Assets
Bank Size	Ln x Total Asset
Inflation	(Current month CPI-Previous month CPI)/(Previous month CPI)
Interest Rate	Bank Indonesia Benchmark Interest Rate
Altman Z-Score	$Z = 6{,}56X_1 + 3{,}26X_2 + 6{,}72X_3 + 1{,}05X_4$
Modified/Revised	Z = Financial Distress Index; X_1= Working Capital/Total Asset; X_2= Retained earnings/Total Asset; X_3= EBIT/Total Asset; X_4= Book Value of Equity / Book Value of Total Liabilities

3.2 Panel Data Regression

The regression analysis of panel data is a data structure including several years and companies under research. In general, parameter estimation in regression analysis with cross section data is conducted using the least squares estimation method commonly known as Ordinary Least Square (OLS). Data Panel Regression Method will provide estimation results in the form of Best Linear Unbiased Estimation (BLUE) (Zulfikar, 2018). Before regressing panel data, research estimation is pooled least square (PLS), by combining cross section data and time data. Random effect (RE), model assumes that errors have inter-time and inter-cross section relationships. Estimation results using RE adjust the constant value (intercept) with the error of each cross section. Random effect models are also known as Generalized Least Square (GLS) techniques so that the assumption of homoscedasticity must be met (there is no heteroscedasticity). Fixed effect (FE), assumes inter-cross section differences are accommodated by the constant (intercept) value.

3.3 Data Analysis Method

The data analysis method used in this research is Ordinary Least Square (OLS). The first step involves processing the independent and dependent variables through descriptive statistical analysis. The second step consists of regressing panel data using three estimation models: fixed effect, random effect, and pooled least square, followed by selecting the appropriate method. Afterward, estimation is carried out with the necessary testing procedures. The results are then analyzed through regression assumption tests to identify potential data issues and ensure compliance with the Best Linear Unbiased Estimator (BLUE) criteria. Once all regression assumptions are satisfied, the results are interpreted. Finally, statistical tests are performed to verify the validity of the hypotheses and determine the coefficient of each independent variable. These tests include R-Square, F Test, and Partial t Test, with an alpha value set at 0.05. This means the research has an error margin of 5%, indicating that errors are expected to occur in less than 5 out of 100 trials.

4. Results and discussion

4.1 Overview of Islamic Bank Financial Distress

This research aims to assess the financial condition of Islamic banks for the period 2018-2022. The findings provide valuable insights for stakeholders regarding the company's financial status and help in anticipating the most effective strategies for expanding the company's portfolio based on various factors. (Shafitranata et al., 2020) explain that analyzing a company's financial ratios is an effective method for evaluating its capabilities and predicting potential financial difficulties in the future. The prediction of the company's financial distress is represented through the categories outlined by Altman in the modified/revised Z-Score model.

Table 2. Altman Z-Score Limit Classification

Model Zone	Safe	Gray	Distress
Z-Score Revised	> 2.99	2.99 – 1.88	< 1.80

Source: Data processed

Conditions in which a company's Z-Score is in the <1.80 zone, indicates that a company is bankrupt, while a Z-Score of 1.88-2.99 indicates that a company is in financial distress and is predicted to face bankruptcy. This means that a lower score indicates a higher probability of bankruptcy and vice versa. The most safe zone is with a Z-Score value above 2.99, indicating the company is managing assets effectively and efficiently (Prasad & Singh, 2021). Calculation of Z-Score of Islamic banks in Indonesia is presented in Figure 2.

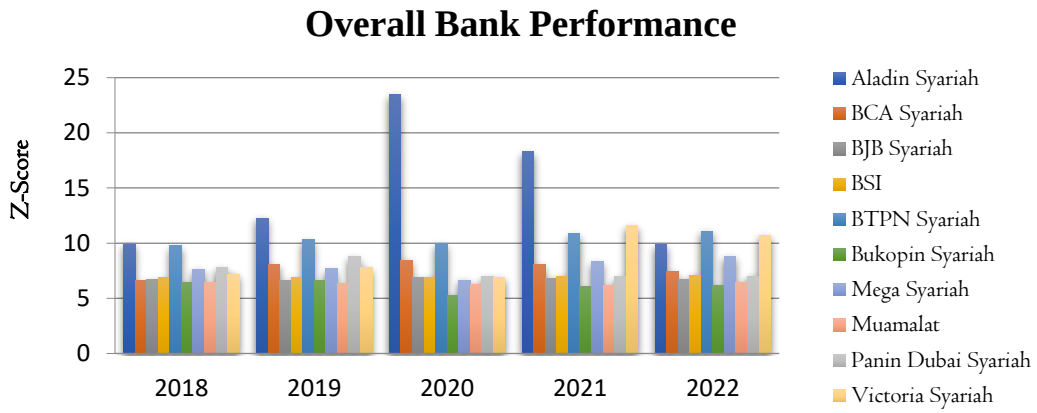

Figure 2. Financial Distress of Islamic Banks for 2018-2022 Period

Overall, Islamic bank performance in Indonesia for the period 2018-2022 is in a safe condition / not in financial distress or above the value of 2.99. The lowest value of Islamic banks in Indonesia for the 2018-2019 period is Bank Muamalat and Bukopin Syariah for the 2020-2022 period. This indicates that even though they are in conditions of not experiencing difficulties, Bank Muamalat and Bank Bukopin Syariah are considered to need evaluate overall operational activities so as can avoid potential financial distress and bankruptcy. Bank Aladin Syariah, 2017 research Shafitranata et al., (2020) predicts that Bank Net Syariah before changing to Bank Aladin Syariah is in a gray area or is in financial distress, so that the company's strategy in dealing with potential bankruptcy through the acquisition of Net Syariah into Aladin Syariah and is considered successful in improving company performance.

4.2 Descriptive Analysis

The following describes the characteristics of the sample or population in this research, including the median, minimum value, maximum value, and standard deviation for each variable. Table 1 presents the observational results for Islamic banks in Indonesia over the period 2018-2022. This study utilizes annual data from 10 Islamic banks.

Table 3. Descriptive Analysis Results

	Financial Distress	NPF	FDR	GCG	ROA	CAR	Bank Size	Inflation	Interest Rate
Mean	8.310	2.830	18710.65	2.022	1.235	52.877	15.205	2.982	4.37
Max	23.441	9.54	506600	3	13.58	390.5	17.871	5.51	5.75
Min	5.287	0	0	1	-10.85	12.34	10.830	1.68	3.5
Std. Dev	3.105	2.239	92548.89	0.603	4.714	78.403	1.841	1.386	0.852

Source: Data processed

The analysis of Islamic banking in Indonesia shows that the financial distress variable falls within a moderate range, with a minimum value of 5,287, a maximum of 23,441, an average of 8,310, and a standard deviation of 3,105. Other variables such as NPF, FDR, GCG, ROA, CAR, Bank Size, Inflation, and Interest Rate also exhibit moderate and reasonable variations. The findings indicate that, during the observed period, the majority of Islamic banks in Indonesia demonstrated overall satisfactory performance.

4.3 Panel Data Analysis

4.3.1 Common Effect Method Approach

The first step involves data processing using the Common Effect Model (CEM) approach, which is required to perform the Chow test. In this method, the dependent variable is financial distress, while the independent variables include NPF, FDR, GCG, ROA, CAR, Bank Size, Inflation, and Interest Rate. The results of the test are presented in Table 4.

Table 4. Estimation Results of Common Effect Method

Variabel	Coeficient	t-Statistic	Prob.
Financial Distress	7.482	1.690	0.000
NPF	0.152	-3.730	0.098
FDR	-7.340	-1.770	0.001
GCG	-0.539	6.15	0.084
ROA	0.219	16.360	0.000
CAR	0.041	-0.180	0.000
Bank Size	-0.017	01.080	0.856
Inflation	-0.135	-0.14	0.286
Rate	-0.028	3.800	0.892
R-square	0.893		
Adj. R-squared	0.873		
Prob (F-statistic)	0.000		

Source: Data processed

Based on Table 4, using the Common Effect Model, the R-squared value is 89.3%. Among the eight independent variables, three—FDR, ROA, and CAR—have a significant impact on the dependent variable, while the remaining five variables—NPF, GCG, Bank Size, Inflation, and Interest Rate show no significant effect at $\alpha = 5\%$. However, when the significance level is adjusted to $\alpha = 10\%$, the variables NPF, FDR, ROA, GCG, and CAR all have a significant impact on the financial distress of Islamic banks in Indonesia.

4.3.2 Fixed Effect Method Approach

Next, the same data is processed using the Fixed Effect Model (FEM) approach. FEM assumes the presence of intercept differences, where the intercept varies across individuals while the time series remains constant. The test results are presented in Table 5.

Table 5. Estimation Results of Fixed Effect Method

Variabel	Coeficient	t-Statistic	Prob.
Financial Distress	9.901	2.980	0.005
NPF	0.279	2.070	0.047
FDR	-0.000	-3.810	0.001
GCG	-0.377	-0.710	0.486
ROA	0.235	3.830	0.001
CAR	0.032	5.250	0.000
Bank Size	-0.189	-0.970	0.338
Inflation	-0.112	-0.890	0.381
Rate	-0.044	-0.20	0.841
R-square	0.819		
Adj. R-squared	0.783		
Prob (F-statistic)	0.281		

Source: Data processed

The R-squared value for the Fixed Effect Model (FEM) method is 81.9%, which is lower than that of the Common Effect Model (CEM). Unlike the CEM method, the FEM results indicate that four independent variables NPF, FDR, ROA, and CAR have a significant impact on the dependent variable, while GCG, Bank Size, Inflation, and Interest Rate do not show significant effects at $\alpha = 5\%$. A Chow test was conducted to compare FEM with CEM, and the results revealed that the random chi-square cross-section probability value is $0.0000 < 0.05$. This suggests that the CEM panel data estimation model is more suitable than the FEM.

4.3.3 Random Effect Method Approach

The Random Effect Model (REM) is a model that incorporates residuals, which are assumed to have both time-series and inter-individual/inter-company relationships. The results of the data processing using the REM approach are presented in Table 6.

Table 6. Estimation Results of Random Effect Method

Variabel	Coeficient	t-Statistic	Prob.
Financial Distress	7.616	3.710	0.000
NPF	0.164	1.740	0.081
FDR	-7.400	-3.780	0.000
GCG	-0.540	-1.670	0.095
ROA	0.218	5.890	0.000
CAR	0.040	15.570	0.000
Bank Size	-0.028	-0.280	0.777
Inflation	-0.132	-1.070	0.285
Rate	-0.027	-0.130	0.896
R-square	0.893		
Adj. R-squared	0.756		
Prob (F-statistic)	0.000		

Source: Data processed

Table 6 shows that the R-squared value for the Random Effect Model (REM) is the same as the CEM method, at 89.30%. Not same with the previous methods, the REM results indicate that three independent variables FDR, ROA, and CAR have a significant effect on the dependent variable at α = 5%. Additionally, the variables NPF and GCG show a significant effect at α = 10%, while Bank Size, Inflation, and Interest Rate have no impact on the dependent variable. To determine the better model between CEM and REM, the Lagrange Multiplier (LM) Test was conducted. Previous LM test results indicated that the CEM method was superior to FEM, so the LM test was used to compare CEM and REM. The LM test results revealed that the probability value of the random chi-bar squared is 0.249 > 0.05, suggesting that the CEM or OLS (Pooling Least Square) model is more appropriate than REM.

4.4 Panel Data Regression Results

Based on the panel test model estimation results, it is concluded that the CEM is the best regression model after testing the CEM, FEM, and REM methods. Therefore, the subsequent discussion of the research findings is based on the CEM. From Table 4, the CEM model can be derived as follows:

$R_{it} = 7.482+0.152NPF_{it} - 7.340FDR_{it} - 0.539GCG_{it} + 0.219ROA_{it} + 0.041CAR_{it} - 0.017Size_{it} - 0.135Inf_{it} - 0.028\ Rate_{it}$

4.5 Discussion

4.5.1 Hypothesis 1: Non-performing Financing influences Financial Distress

The research hypothesis posits that non-performing financing or non-performing loans in Islamic banks have a positive effect on financial distress. According to the analytical test results, the regression coefficient for the NPF variable is 0.152, with a probability value of 0.098 > 0.05. Therefore, it can be concluded that the first hypothesis is not supported, as non-performing financing does not have a significant effect on the financial distress of Islamic banks in Indonesia. Research by Abusharbeh, (2022), shows that non-performing loans in banks have a positive impact when a financial crisis occurs, this shows that companies have not been in a position to reduce the rate of credit quality and corporate risk control. Ha, (2021) also states that government policies on credit quality have information asymmetry or the risk of experiencing financial distress.

This research shows that NPF or non-performing loans at Islamic banks have an effect but are not significant. Government policies during the pandemic are very helpful for companies so that financial difficulties do not occur and have an impact on economic recession, including OJK policies, namely providing relaxation through restructuring to all debtors affected by the Covid pandemic. Policy towards

restructuring non-performing loans is an appropriate and efficient step in overcoming the company's financial distress, Hotchkiss et al., (2021) identifying companies or debtors who restructure allows them to maintain financial control by investing capital and extending credit terms.

4.5.2 Hypothesis 2: Financing to Deposit Ratio influences Financial Distress

The second hypothesis suggests that the financing to deposit ratio (FDR) or bank liquidity has a positive effect on the financial distress of Islamic banks. The results indicate that the regression coefficient for FDR is -7.340, with a probability value of 0.001, showing a negative and statistically significant effect. Therefore, the second hypothesis, which states that FDR has a significant effect on the financial distress of Islamic banks in Indonesia, is accepted.

Banks are intermediary institutions that manage public funds, fund management must be managed properly in order to increase public confidence. The results of this research show a significant effect, supported by research Elfeituri & Alotaibi, (2021) which states that good FDR management can overcome financial distress and introduce diverse sources of income. The covid pandemic and economic recession greatly affected people's income sources and consumption, several government measures were implemented to increase people's purchasing power through salary subsidies, pre-employment cards, family hope programs, and provision of basic necessities. Reduced returns on loans lead to an increase in the provision for impairment losses on loans and potentially reduce the company's capital (Forgione & Migliardo, 2018).

4.5.3 Hypothesis 3: Good Corporate Governance influences Financial Distress

The third hypothesis suggests that GCG has a significant effect on financial distress. The results revealed that GCG has a negative and insignificant effect on the financial distress of Islamic banks, with a coefficient of -0.539 and a significance level of 0.084 > 0.05. Therefore, the hypothesis stating that GCG significantly affects financial distress is not accepted. The implementation of GCG serves as a tool for companies to establish healthy and professional management. This research indicates that GCG does not have a significant effect on financial distress, which contrasts with the findings of Yasa et al., (2018), who argue that GCG significantly influences a company's financial performance, both positively and negatively. One aspect of GCG in Islamic banks, such as corporate social responsibility (CSR), greatly impacts the risk of financial distress (Boubaker et al., 2020). The benefits of implementing CSR and GCG include creating a positive corporate environment, enhancing financial stability, and fostering a more resilient economy.

4.5.4 Hypothesis 4: Return on Assets influences Financial Distress

The fourth hypothesis posits that ROA has a positive effect on financial distress. The analysis results show that the regression coefficient for the ROA variable is 0.219, with a probability value of 0.000 < 0.05. Based on this, we conclude that the fourth hypothesis is accepted, as ROA has a positive and significant effect on the financial distress of Islamic banks in Indonesia. The research results show that the company's ability to generate profits during a pandemic and economic recession greatly affects the company's financial condition. Based on data on the financial ratio of Islamic bank ROA fluctuates and tends to decrease every year, research Meher & Getaneh, (2019) and Ho & Mohd-Raff, (2019), states that the company's financial performance during a pandemic and economic recession tends to be less good. This is caused by the capability of Islamic banks during this period decreasing, so the company must manage credit properly and not increase the ratio of allowance for impairment losses. Corporate profits are also affected by high operating expenses and a significant decrease in operating income, so companies must maintain assets to avoid potential bankruptcy of the company.

4.5.5 Hypothesis 5: Capital Adequacy Ratio influences Financial Distress

The fifth hypothesis suggests that CAR has a positive effect on financial distress. The analysis results show that the regression coefficient for the CAR variable is 0.041, with a probability value of 0.000 < 0.05. Therefore, it can be concluded that the fifth hypothesis is accepted, as CAR has a positive and significant effect on the financial distress of Islamic banks in Indonesia. Research by Gandhi et al., (2019) states that the capital adequacy ratio tends to miss extreme events that impact the company's financial sector. This depends on a complex combination of financial ratios and when financial distress

occurs the regulator provides a windows dress policy by providing incentives for banks to exceed the CAR threshold. CAR is a sector that is quite influential and significant on the financial distress of Islamic banks in Indonesia, this is because Islamic banking in Indonesia still relies on additional funds from the parent company and uses the right issue option for public companies, and has not met the capital set by the regulator. Capital adequacy ratio guarantees the risks arising from operational activities and assets so as to avoid financial distress (Buchdadi et al., 2020).

4.5.6 Hypothesis 6: Bank Size influences Financial Distress

The sixth hypothesis suggests that bank size has an effect on financial distress. The results show that bank size has a negative and insignificant effect on the financial distress of Islamic banks, with a coefficient of -0.017 and a significance level of 0.856 > 0.05. Therefore, the hypothesis that bank size significantly affects financial distress is not accepted. Ozili (2018) and Duong et al., (2022) argue that bank size is linked to greater banking stability, as excessive competition can lead to excessive risk-taking and result in losses during economic downturns, thereby destabilizing the banking system. In Indonesia, the size of Islamic banks is still largely derived from their parent companies, which means it does not directly impact financial difficulties. This finding is further supported by research from Flori et al., (2021), which indicates that company size does not affect corporate finance, but instead influences modern wholesale-oriented marketing strategies or product sales.

4.5.7 Hypothesis 7: Inflation influences Financial Distress

The seventh hypothesis suggests that inflation has a positive effect on financial distress. The analysis results show that the regression coefficient for the inflation variable is -0.135, with a probability value of 0.286 > 0.05. Therefore, it can be concluded that the seventh hypothesis is not supported, as inflation does not have a positive and significant effect on the financial distress of Islamic banks in Indonesia.
A high inflation rate can lead to bank runs or a rush to withdraw money, which can disrupt banks' efforts to raise public funds. Research by Hasanov et al., (2018) found that inflation expectations impact the financial performance of banks, especially during significant declines in oil prices. However, during pandemic conditions and economic recessions, the inflation rate does not appear to influence the financial performance of banks. This is consistent by Li et al., (2021), who argue that inflation is not solely a monetary fiscal phenomenon but is heavily influenced by the monetary policy regime in place to manage uncertainty in company performance.

4.5.8 Hypothesis 8: Interest Rate influences Financial Distress

The eighth hypothesis suggests that the interest rate variable affects financial distress. The results indicate that interest rates have a negative and insignificant effect on the financial distress of Islamic banks, with a coefficient of -0.028 and a significance level of 0.892 > 0.05. Therefore, the hypothesis that interest rates significantly affect financial distress is not accepted. Pandemic and economic recession strategies carried out by Islamic banks are to reduce lending rates or restructure loans and deposit interest. The decrease is not very significant in pandemic conditions and economic recession, Wieland & Yang (2020) states that lowering interest rates only has a persistent impact on local employment and has no impact on the financial condition of banks globally. Consistent with research Kobayashi & Takaguchi (2018) which states that banks tend to provide high interest rates in times of financial distress, so that a decrease or increase in interest rates has no impact on bank financial distress.

5. Conclusion

This research concludes that financial distress in Islamic banks in Indonesia during the COVID-19 pandemic and economic recession is significantly affected by the Financing to Deposit Ratio (FDR), Return on Assets (ROA), and Capital Adequacy Ratio (CAR). However, factors such as Non-Performing Financing (NPF), Good Corporate Governance (GCG), Bank Size, Inflation, and Interest Rates had no significant effect. This study highlights the need for Islamic banks to focus on efficiency, restructuring, and maintaining an optimal capital adequacy ratio to reduce financial distress and maintain financial performance.

Global economic challenges stemming from the COVID-19 pandemic and economic recession continue to impact the banking sector, particularly Islamic banks in Indonesia. Factors such as increased liquidity

needs, fluctuating inflation rates, and stringent core capital requirements have been ongoing challenges. Some banks are still struggling to meet the minimum capital requirement of IDR 3 trillion as mandated by the Financial Services Authority. Government policies, such as credit restructuring and fiscal incentives, have provided temporary relief but highlight the need for stronger structural adjustment and risk management in the sector. This study underscores the importance of regulatory support and strategic measures by Islamic banks to effectively deal with the current economic uncertainty.

Suggestions

Conditions that occur in all sectors, especially the financial sector, need support from the government regarding policies and regulations to maintain the stability of Islamic banks in Indonesia. The risks arising from financial distress of Islamic banks have a systemic impact on other sectors, resulting in decreased purchasing power, stagnant profitability, and eroding company assets.

Limitations

This research has limitations, including the sector studied is only Islamic banks in Indonesia so that the variables that influence are not comprehensive. It is possible that other variables play a role in the financial distress of Islamic banks in Indonesia. Future research can consider the long-term impact of company performance and health on financial distress and bankruptcy prediction. Besides, researchers can add mediator variables that affect the company's financial distress.

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