CAKRAWALA – Repositori IMWI | Volume 07, Nomor 03, Mei-Juni 2024
p-ISSN: 2620-8490; e-ISSN: 2620-8814

Analysis of The Relationship Between Financial Distress and Manipulation in Islamic Commercial Banks After COVID-19

Ichsan Arydani[1], Sugiyati Fatma Laela[2]
Department of Islamic Business Management, Faculty of Islamic Accounting, Tazkia Islamic University College, Indonesia
E-mail: ichsan.arydani1@gmail.com

ABSTRACT

This study aims to analyse financial distress and potential financial statement manipulation in Islamic commercial banks. In addition, this study analyses the relationship between the two. Financial distress is measured by the Altman Z-Score m,odelBeneish M-Score measures potential financial statement manipulationh M-Score. The analysis techniques used are descriptive qualitative and Pearson CorrelatioUsinging data from 12 Islamic Commercial Banks in Indonesia for the period 2020 - 2022, the results of the Altman Z-Score calculation show that Islamic commercial banks in Indonesia are financially healthy. This indicates the effectiveness of Islamic bbanks'business strategies, especially in facing the Covid-19 pandemic. The results of the Beneish M-Score calculation prove that Islamic banks are not included in the manipulator category. The Pearson Correlation Coefficient shows that there is no significant relationship between financial distress and financial statement manipulation at Islamic Commercial Banks in Indonesia. The tight supervision by regulators closes the opportunity for manipulation of financial statements. In addition, the characteristics of Islamic banks that are dominated by funds from retail customers can explain the insignificance of the relationship between financial distress and financial statement manipulation.

Keywords: Financial Distress, Manipulation, Z-Score, M-Score, Correlation

INTRODUCTION

During the Covid-19 Pandemic, the government took firm steps to urge people to stay at home for the health of the public. Government policy on the public's appeal to stay at home has resulted in bank customers massively switching to using digital banking as their transaction and financial tool (Yuningsih et al., 2022). Digital banking is an electronic service in order to serve and provide information to customers more easily, quickly, can maximize the use of customer data, and according to needs, and can be run completely independently by customers, By paying attention to various aspects of security (OJK, 2018). The application of digital banking has been enjoyed by customers as it is today such as Internet Banking, Phone Banking, SMS Banking, and Mobile Banking (Febrian, 2014).

The implementation of digital banking is a strategic form of banking to improve the quality of service to customers (Yolanda et al., 2022). According to Yolanda et al., (2022), the quality of digital services created by banking has a significant influence on customer satisfaction, because it can meet the needs of the community (Darmawan &; Ridlwan, 2018). When customers are satisfied, it will increase consumer loyalty based on

satisfaction which will eventually increase income (Vahlevi & Indra Vitaharsa, 2022).

However, profitability experienced by several Islamic banks decreased in the period 2020 - 2021. Based on the financial statements presented on the website (https://idx.co.id/), in 2021, Bank Aladin Syariah suffered a net loss of IDR 113 billion. In 2022, Bank aladin syariah again suffered a loss of IDR 270 billion. PT Bank Panin Dubai Syariah Tbk experienced a Net Loss in 2021 of IDR 814 trillion. Bank Bukopin syariah suffered a very significant loss of IDR 209 billion. In 2020, Bank Bukopin Syariah only recognized Net Income of IDR 1.8 billion. The same thing was experienced by PT Bank Victoria Syariah in 2021 and 2022 which experienced a Net Loss in 2021 of IDR 18.5 billion and in 2022 of IDR 29.8 million. Based on the website (https://lps.go.id/), there are 18 banks that have gone bankrupt and completed the liquidation process since 2020 – now.

The decline in bank performance in the period was triggered by the condition of financing customers affected by the pandemic. (Sulton et al., 2022) said that there was an increase in uncollectible receivables too large because customers avoided credit payments after the Covid-19 Pandemic. This decline in revenue will affect the financial health of Islamic banks (Shara et al., 2022). If not mitigated appropriately, falling revenues will cause financial distress that can lead to bankruptcy. (Mai et al., 2024) affirm that high financing, especially problematic financing, is proven to increase the potential for bank bankruptcy.

Responding to the phenomenon of declining financial performance, management needs to predict the potential for financial distress that can lead to bankruptcy. According to Syilviana & Rachmawati (2016), bankruptcy is a condition of a company that is no longer able to run its business due to lack of funds and cannot pay off its liabilities. The potential for bankruptcy can be analyzed from the financial statements presented using the Altman Z-Score model (Marbun, 2022). Altman Z-Score is the most widely used bankruptcy prediction model in the world and has been tested for reliability. The Altman Z-Score formula is very sensitive and responsive to any changes in a company's financial condition (Bakhtiar et al., 2018). The importance of these predictions is behind the first purpose of this study, which is to analyze descriptively financial distress in Islamic commercial banks.

A decrease in financial performance is certainly not desired by management because it will reduce the company's performance reputation. If predicted, the company has the potential to experience financial pressure, it is likely that management will commit fraud to cover up their low performance. Cheating refers to dishonest acts that aim to gain an advantage illegally or unethically (Irianto & Novianti, 2018). Andrew et al., (2022) prove that companies that experience financial distress tend to commit fraud through financial statements. Manipulation of financial statements is done by changing the financial statements so that they do not reflect the actual financial state of the company (Hidayatullah &; Sulhani, 2018). Dinasmara & Adiwibowo, (2020) conclude that the most frequent fraud

committed by company management is the manipulation of financial statements.

Manipulation of financial reporting can be detected with the Beneish M-Score model. The Beneish M-Score model can detect the possibility of companies committing financial reporting fraud and is able to classify these companies as manipulators and non-manipulator companies (Fhiqi & Triani, 2019). The results of the Beneish M-Score model can detect fraudulent actions committed by companies by 89.5% (Beneish, 1999) . To identify the potential for manipulation of financial statements, the purpose of these two studies is to analyze descriptively the manipulation of financial statements of Islamic commercial banks.

The tendency to manipulate financial statements will increase when banks experience financial distress. Marbun (2022), proves that financial distress has a positive influence on financial statement manipulation. Likewise, (Tanusdjaja & Kurniawan, 2018) strengthen with the results of his research that Alman Z-Score has a significant effect on fraud. Therefore, the purpose of these three studies is to analyze the relationship between financial distress and manipulation of financial statements in the context of financial institutions.

In this study, there are two recents. First, in terms of context, this study is a study testing both Altman Z-Score and Beneish M-Score methods simultaneously at Sharia Commercial Banks in Indonesia After the Covid-19 Pandemic. This method makes it possible to gain a more comprehensive understanding of financial health and potential manipulation of financial statements at Sharia Commercial Banks in Indonesia Post Covid-19. Testing of potential bankruptcy with Altman Z-score and Beneish M-Score at Sharia Commercial Banks in Indonesia was rife during the Covid-19 pandemic, as was done by (Muharrami & Sinta, 2018). There are also studies that have the same goal, but use different methods, namely Grover G-Score and Springate S-Score, as conducted by (Febrian et al., 2022).

Second, in terms of method, this study tested the correlation coefficient between the results of the Altman Z-Score method and the results of the Beneish M-Score. This study measured the correlation between the Altman Z-Score method and the Beneish M-Score to determine the significance of the relationship between the two methods. Meanwhile, previous studies were limited to testing both separately and descriptively like research conducted by (Citra Pertiwi et al., 2023; Putra, 2021; Tanusdjaja &; Kurniawan, 2018).

This research uses financial data of all Islamic Commercial Banks for the period 2020 – 2022 which amounts to 3 financial years. Altman Z-Score and Beneish M-Score scores were calculated in the period, analyzed descriptively, and tested for correlation of both scores with the Pearson Correlation. The results of this study become input for Sharia Bank management about the condition of its financial health. For depositor investors, information about the potential manipulation of financial statements is an important consideration in their investment decisions. As for regulators, the results of this study feedback the need for relevant regulations to limit the practice of financial statement

manipulation.

RESEARCH METHOD

The object of research analyzed in this study is Sharia Commercial Banks registered with the Financial Services Authority for the period 2020 – 2022. Financial distress is measured by the Altman Z-Score specifically for non-manufacturing companies with the following formula (Altman, 2000):

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

Working Capital to Total Asset (X1)

This ratio serves to determine the bbank'sability to meet its short-term obligations. The greater the value of this ratio, the better the ccompany's liquidity condition.

Return Earning to Total Asset (X2)

This ratio serves to determine the ccompany's ability to obtain cumulative income from operational activities against the number of existing assets. A high value indicates that the company can generate high revenue by using relatively smaller total assets.

Earnings Before Interest and Taxes to Total Asset (X3)

This ratio aims to determine the ability of the ccompany's assets to generate profits.

Book Value of Equity to Book Value of Total Liabilities (X4)

This ratio reflects the proportion of equity to total liabilities held by the company at any given time. A high value indicates that most of the company's capital comes from equity, which can be considered an indicator of financial security due to smaller liabilities.

If the company's Z-score is above 2.99, it is predicted that the bank is in a safe financial position. If the Z-score is between 1.81 and 2.99, then the bank is in a financial grey area. If the Z-score is less than 1.81, the bank is most likely experiencing financial distress (Altman, 2000).

Manipulation of financial statements is predicted with the Beneish M-Score which consists of eight weighted ratios with predetermined coefficients. Beneish M-Score formula as follows:

M = -4,84 + 0,92DSRI + 0,528GMI + 0,404AQI + 0,892SGI + 0,115DEPI – 0,172SGAI + 4,679TATA – 0,327LVGI

1. **Receivable Days Sales Index (DSRI)**

This ratio is used to measure how efficient a company is at collecting receivables from sales. A high DSRI value indicates that the company can collect receivables faster than sales, which can be considered a sign of efficiency in sales. The DSRI variable can be obtained by the following formula:

DSRI = [Account Receivables (t) / Sales (t)] / [Account Receivables (t-1) / Sales (t-1)]

2. **Gross Margin Index (GMI)**

This ratio is used to evaluate the profitability of an enterprise. A high GMI value indicates that the company can generate a net profit greater than total sales in the past. The GMI variable can be obtain by the following formula:

GMI = [Gross Profit (t-1) / Sales (t-1)] / [Gross Profit (t) / Sales (t)]

3. **Asset Quality Index (AQI)**

AQI is a measure used to assess the asset quality of a financial institution. The lower the AQI value, the higher the risk to the company's assets. AQI can be obtained by the following formula:

AQI = [1 – ((Current Assets (t) + Fixed Assets (t)) / Total Assets (t)] / [1 – ((Current Assets (t-1) + Fixed Assets (t-1)) / Total Assets (t-1)]

4. Sales Growth Index (SGI)

This measure is used to measure the sales growth rate of a company. An SGI value greater than 1 indicates that the company's sales increased from the previous year. The SGI variable can be obtained by the following formula:

SGI = Sales (t) / Sales (t-1)

5. Depreciation Index (DEPI)

This measure is usedD.E.P.I.assess the depreciation rate of fixed assets of an enterprise. A DEPI value greater than 1 indicates that the depreciation rate of the ccompany's fixed assets is high. The DEPI variable can be obtained by the following formula:

DEPI = [Depreciation (t-1) / (Depreciation (t-1) + Fixed Assets (t-1))] / [Depreciation (t) / (Depreciation (t) + Fixed Assets (t))]

6. Sales General and Administration Expenses Index (SGAI)

This ratio is used to measure the annual percentage change of selling, general, and administrative expenses (SG&A) compared to revenue. The greater the value of SGAI, the greater the company incurs costs for non-production operations. The SGAI variable can be obtained by the following formula:

SGAI = [SGAI (t) / Sales (t)] / [SGAI (t-1) / Sales (t-1)]

Leverage Index (LVGI)

This ratio is used to measure changes in the debt to assets ratio from year to year. An LVGI value greater than 1 indicates that the ccompany's debt-to-asset ratio increased from the previous year. The LVGI variable can be obtained by the following formula:

LVGI = [Long Term Debt (t) / Total Assets (t)] / [Long Term Debt (t-1) / Total Assets (t-1)]

8. Total Accrual to Total Assets (TATA)

This ratio measures the accruals of a company compared to its total assets. A TATA value higher than 1 indicates that the company has more accruals than its assets. The TATA variable can be obtained by the following formula:

TATA = [(Current Assets (t) - Current Assets (t-1)) – (Cash and Cash Equivalent (t) - Cash and Cash Equivalent (t-1)) – (Current Liabilities (t) - Current Liabilities (t-1)) + Depreciation] / Total Assets

M-Score result less than -2.22 indicates that the bank is included in the non-manipulator category. The Bank is included in the Grey Company category if it is $-2.22 \leq$ M-Score < 2.22. Banks with an M-Score of ≥ 2.22 are indicated to manipulate financial statements.

Z-Score and M-Score will then be tested for correlation with the Pearson Correlation with the following equation:

$r = (\sum (x - \bar{x}) (y - \bar{y})) / (n * sx * sy)$

Here is the interpretation of the value of the Pearson correlation coefficient:

a) $r \geq 0,7$: Very strong relationship
b) $0,5 \leq r < 0,7$: Strong relationships
c) $0,3 \leq r < 0,5$: Ongoing relationships
d) $0,1 \leq r < 0,3$: Weak relationships
e) $r \leq 0,1$: No relationship

The Test Flow is presented in Figure 1 below.

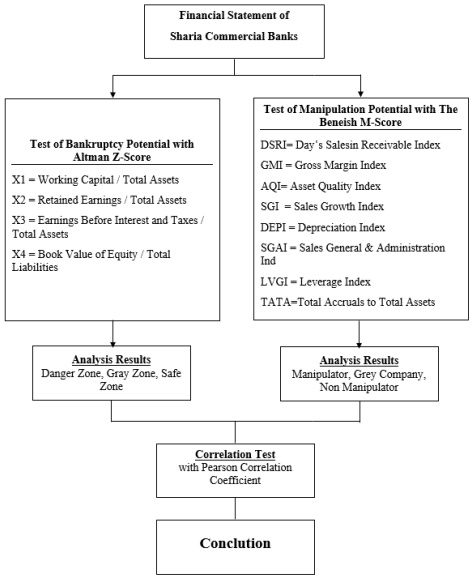

Figure 1. Research Framework

RESULT AND DISCUSSION

Result

From a total of 12 Islamic commercial banks, the population of all bank data was obtained for analysis. The results of the Z-Score calculation are presented in Table 1, 2 and 3.

Table 1. The Z-Score Results of Indonesia's SCB 2020

		2020					
NO	SHARIA COMMERCIAL BANKS	X1	X2	X3	X4	Z-SCORE	INDICATION
1	Bank Muamalat Indonesia	0.71	0.01	0.00	0.28	4.98	Safe Zone
2	BCA Syariah	0.77	0.04	0.01	1.56	6.87	Safe Zone
3	Bank Victoria Syariah	0.78	-0.01	0.00	0.67	5.79	Safe Zone
4	Bank KB Bukopin Syariah	0.60	-0.08	0.00	0.42	4.10	Safe Zone
5	Bank BTPN Syariah	0.81	0.25	0.07	0.61	7.28	Safe Zone
6	Bank Mega Syariah	0.62	0.01	0.01	0.17	4.35	Safe Zone
7	BJB Syariah	0.87	-0.08	0.00	1.30	6.86	Safe Zone
8	Bank Aladin Syariah	0.92	-0.29	0.06	20.50	27.02	Safe Zone
9	Bank Aceh Syariah	0.92	0.02	0.02	0.45	6.68	Safe Zone
10	Bank BPD NTB Syariah	0.95	0.07	0.02	0.46	7.05	Safe Zone

Table 2. The Z-Score Results of Indonesia's SCB 2021

		2021					
NO	SHARIA COMMERCIAL BANKS	X1	X2	X3	X4	Z-SCORE	INDIC
1	Bank Muamalat Indonesia	0.70	0.01	0.00	0.23	4.90	Safe
2	BCA Syariah	0.75	0.04	0.01	1.18	6.35	Safe
3	Bank Victoria Syariah	0.84	-0.01	0.01	5.19	11.02	Safe
4	Bank KB Bukopin Syariah	0.82	-0.07	-0.05	0.84	5.71	Safe
5	Bank Panin Dubai Syariah	0.90	-0.11	-0.06	5.34	10.74	Safe
6	Bank BTPN Syariah	0.85	0.29	0.10	0.64	7.85	Safe
7	Bank Mega Syariah	0.89	0.06	0.02	1.10	7.35	Safe
8	BJB Syariah	0.88	-0.06	0.01	1.02	6.72	Safe
9	Bank Aladin Syariah	0.91	-0.15	-0.06	15.06	20.88	Safe
10	Bank Aceh Syariah	0.83	0.02	0.02	0.49	6.11	Safe
11	Bank BPD NTB Syariah	0.96	0.07	0.02	0.47	7.11	Safe
12	Bank Syariah Indonesia	0.74	0.04	0.02	0.33	5.39	Safe

Table 3. The Z-Score Results of Indonesia's SCB 2022

		2021					
NO	SHARIA COMMERCIAL BANKS	X1	X2	X3	X4	Z-SCORE	INDICATION
1	Bank Muamalat Indonesia	0.74	0.01	0.00	0.37	5.28	Safe Zone
2	BCA Syariah	0.69	0.04	0.01	0.72	5.51	Safe Zone
3	Bank Victoria Syariah	0.92	0.00	0.00	4.15	10.42	Safe Zone
4	Bank KB Bukopin Syariah	0.75	-0.07	-0.01	0.61	5.22	Safe Zone
5	Bank Panin Dubai Syariah	0.83	-0.09	0.02	1.93	7.31	Safe Zone
6	Bank BTPN Syariah	0.86	0.31	0.11	0.56	7.97	Safe Zone
7	Bank Mega Syariah	0.89	0.06	0.02	1.10	7.35	Safe Zone
8	BJB Syariah	0.88	-0.04	0.01	0.67	6.44	Safe Zone
9	Bank Aladin Syariah	0.90	-0.13	-0.06	2.94	8.23	Safe Zone
10	Bank Aceh Syariah	0.87	0.02	0.02	0.44	6.39	Safe Zone
11	Bank BPD NTB Syariah	0.94	0.06	0.02	0.44	6.95	Safe Zone
12	Bank Syariah Indonesia	0.75	0.04	0.02	0.31	5.51	Safe Zone

Table 1 on S.C.B. analyzes 10 Islamic banks, because Bank Panin Dub Syariah'sh's 2020 financial statements have not adjusted to Sharia Financial Accounting Standards in Indonesia. In addition, Bank Syariah Indonesia officially operated on February 1, 2021. Table 1-3 shows that all Islamic commercial banks have healthy indicators (not under financial stress). All scores are above 2.99. Banks are a special industry that must be regulated with strict policies (high regulated industry) to maintain financial sector stability. The Financial Services Authority always monitors the health and adequacy of liquidity of each bank.

In 2020, several banks posted negative retained earnings such as Bank Victoria Syariah, BJB Syariah, and Bank Aladin Syariah, which had an impact on decreasing profitability ratios. This means that total net income is not enough to pay total dividends. The bank may experience a decline in profits or even losses in previous periods. Retained earnings are a source of capital as a strong buffer in the event of economic turmoil. Dahmash et al., (2023) added that retained earnings is needed to realize bank's management plans in the future expansion,

acquisitions, diversification of products and services, and opening of new branches.

These banks seek to increase the Market Value of Equity and reduce their total liabilities to lower the value of leverage. Leverage has a significant influence on the risk of bankruptcy of Islamic banks (Afiqoh & Laila, 2018). The decrease in leverage value was also carried out in 2021 by several banks, such as Bank Victoria Syariah, Bank Panin Dubai Syariah, and Bank Bukopin Syariah. This effort was made considering the negative value of their profitability and activities due to the net loss they experienced.

The banks that make these efforts aim to minimize the risk of bankruptcy that will be caused by high liabilities. Liabilities in Islamic banks that are short-term are usually in the form of deposits, both current accounts and savings accounts with wadiah contracts. At Bank Aladin, for example, short-term liabilities are quite large in the form of issuance of securities and profit sharing that are still unpaid.

In 2022, all banks' Z-Score does not have as large inequality as in previous years. This is evidenced by the standard deviation results on the Z-Score of Sharia Commercial Banks for the 2022 period showing 1.4569. Unlike the previous two years, which reached 4.2021 in 2021 and 6.4020 in 2020.

From the calculation results with the Altman Z-Score model above, it is concluded that there are no Sharia Commercial Banks in Indonesia after COVID-19 that are experiencing financial pressure. The relatively high Z Score value may be due to the characteristics of Islamic banks that are different from conventional banks in recording deposits and deposits with a mudharabah or musharakah contract, not as a liability but included in the category of Temporary Syirkah as stated in PSAKS 101 (IAI, 2007); (Syahla & Anggraini, 2023). Therefore, the variable X4 (Book Value of Equity to Book Value of Liabilities) tends to be larger because liabilities in Islamic banks are outside deposit funds with profit sharing contracts. Unlike conventional banks, which recognize deposits as liabilities, so the value of X4 tends to be smaller. There needs to be a new study in modifying the Altman Z-Score model in accordance with the conditions of Islamic Banks.

The calculation of Beneish M-Score to detect manipulation of financial statements in Islamic Commercial Banks in the 2021 and 2022 periods is presented in Tables 4 and 5 below.

Table 4. The M-Score Results of Indonesia's SCB 2021

2021			
NO	SHARIA COMMERCIAL BANKS	M-SCORE	INDICATION
1	Bank Muamalat Indonesia	-2.43	Non-Manipulator
2	BCA Syariah	-2.08	Grey Company
3	Bank Victoria Syariah	-3.55	Non-Manipulator
4	Bank KB Bukopin Syariah	-1.93	Grey Company
5	Bank BTPN Syariah	-1.97	Grey Company
6	Bank Mega Syariah	-2.29	Non-Manipulator
7	BJB Syariah	-2.17	Grey Company
8	Bank Aladin Syariah	-1.11	Grey Company
9	Bank Aceh Syariah	-0.39	Grey Company
10	Bank BPD NTB Syariah	-2.26	Non-Manipulator

In 2021, S.C.B. of 10 Sharia Commercial Banks in Indonesia, there are 6 banks that are included in the gray company category. This zone illustrates the indication of manipulating financial statements. 4 banks that are not indicated to manipulate financial statements, namely Bank Muamalat Indonesia, Bank Victoria Syariah, Bank

Mega Syariah, and Bank BPD NTB Syariah. Not much different, in 2022 there are 7 banks indicated to be in gray companies. On the other hand, there are 5 banks that enter non-manipulators. Bank Muamalat Indonesia and Bank Victoria Syariah have consistently not indicated manipulative in their financial statements for 2 years.

Table 5. The M-Score Results of Indonesia's SCB 2022

	2021		
NO	SHARIA COMMERCIAL BANKS	M-SCORE	INDICATION
1	Bank Muamalat Indonesia	-2.88	Non-Manipulator
2	BCA Syariah	-1.99	Grey Company
3	Bank Victoria Syariah	-2.63	Non-Manipulator
4	Bank KB Bukopin Syariah	-0.07	Grey Company
5	Bank Panin Dubai Syariah	-4.67	Non-Manipulator
6	Bank BTPN Syariah	-1.78	Grey Company
7	Bank Mega Syariah	-0.80	Grey Company
8	BJB Syariah	-1.77	Grey Company
9	Bank Aladin Syariah	0.86	Grey Company
10	Bank Aceh Syariah	-2.84	Non-Manipulator
11	Bank BPD NTB Syariah	-1.94	Grey Company
12	Bank Syariah Indonesia	-2.34	Non-Manipulator

From the results of the M-Score test above, it also shows that none of the banks are included in the manipulator category.

Based on the results of Z-Score and M-Score above, correlation testing was then carried out for the relationship between financial distress and financial statement manipulation. Table 6 below is the test result of the Pearson Correlation Coefficient between Z-Score and M-Score models at Sharia Commercial Banks in Indonesia.

Table 6. The Pearson Correlation Coeficient Test Results

STATISTICS	SCORE
Pearson Correlation Pearson (r)	0.061852
N (Amount of Sample)	22

The results of correlation testing showed that there was no significant relationship between financial distress measured by Z-Score and manipulation of financial statements measured by M-Score. The Pearson correlation coefficient (r) of 0.061852 indicates a very weak magnitude of the relationship.

DISCUSSION

The calculation of Altman Z-Score shows that all banks are in good health, despite going through the Covid-19 pandemic in 2020-2021. In addition to strict supervision from regulators, this is one proof of the effectiveness obank'sbank's strategy in mitigating risk. Although the pandemic has had an impact on financial stability, Islamic banks have proven to be better and less risky than conventional banks (Rizwan et al., 2022).

From the funding aspect, the bank optimizes its marketing strategy through digital banking (Indra & Yustati, 2022); (Khasanah et al., 2023). The Bank increased its presence in the community through a website with educational crisis awareness content and maximized web-online banking services such as online account opening (Khan, 2022).

From the aspect of financing, the placement and distribution of funds is carried out more selectively (Aisyah et al., 2021); Financing Restructuring (Sihotang & Hasanah, 2021); and proved to significantly reduce non-performing financing (Meilani et al., 2023). Restructuring is carried out by delaying the payment of principal and margin, extending the repayment time and decreasing the financing margin, especially for community or micro small enterprises.

From the aspect of fund management, the bank carries out the right loss reserve strategy. Heningtyas & Widagdo (2019) prove that the loan loss provision (LLP) is a solution L.L.P. banks to face the risks that will be faced by banks or as a principle of banking prudence.

Based on the findinBeneish'seish's score, overall there was no manipulation of financial statements at Islamic banks. Strict supervision from the Financial Services Authority and Bank Indonesia has proven effective in preventing such actions. However, most Islamic banks found indications of manipulative actions with scores in the gray area. This is allegedly due to profit management practices in Islamic banks. Narsa et al., (2023) proving Beneish scores can detect the presence of profit management. In Islamic banks, profit management in the form of income smoothing is common as a strategy to strengthen liquidity (Iskandar et al., 2022; Khan et al., 2021; Lubis et al., 2021). The practice of income smoothing is allowed in accordance with the fatwa of the National Sharia Council no 87/DSN-MUI/XII/2012 as a strategy to avoid the risk of withdrawing customer funds from Islamic banks to conventional banks.

The correlation between financial distress and manipulation of financial statements proved insignificant. These results contradict research (Marbun, 2022; Pratama & Puspitasari, 2022; Tanusdjaja & Kurniawan, 2018). There are at least two conjectures for this finding. First, strict supervision both on-site and off-site (OJK, 2024), so it iO.J.K.ess likely to perform manipulation. On an on-site basis, Islamic banks are periodically monitored for financial condition and the level of compliance with applicable regulations including bank business continuity. Off-site, Islamic banks must report their performance periodically, audits and other relevant public information. Wijayanti et al., (2020) prove that internally, Islamic banks implement a strict management control system.

Second, in the non-financial industry, covering up unhealthy financial conditions through manipulation of financial statements is more motivated to attract stakeholders, especially investors to keep investing and creditors to continue providing financing. Mohamed & Handley-Schachler (2015) prove manipulation (fraud) of financial statements to attract investors and retain them. However, this may not be entirely the case in the banking industry, where the main source of funds is from savings/deposits of customers. The majority of Islamic banks in Indonesia are consumer and retail banks (Syafrida & Aminah, 2015); which is dominated to serve non-corporate customers. For retail and individual customers, what is in demand and the focus of attention is excellent service, competitive returns less concerned with financial reporting information.

CONCLUSION

Based on the results of testing the Altman Z-Score model at Sharia Commercial Banks in Indonesia for the 2020-2022 period, it shows that all banks are in a financially healthy condition, that is, they do not experience financial distress. This reflects the effectiveness of banks' business strategies' effectiveness, especially during the Covid-19 pandemic.

In testing the manipulation of financial statements with the Beneish M-Score model, there are 6 banks included in gray companies in 2021 and 7 banks in 2022. Not a single bank from Indonesian Sharia Commercial Bank is included in the manipulator category. The results of the Pearson Correlation test showed no significant relationship between financial distress and manipulation of financial statements. The strict supervision of Islamic banks by regulators and the characteristics of Islamic banks with the dominance of retail customers can explain the insignificance of the relationship between the two.

There needs to be development of the Altman Z-Score model to test financial distress in Islamic banks in Indonesia. This is due to the existence of the Temporary Syirkah Fund in Islamic banks which dominates the total assets of banks. In addition, an extension of the research period is needed to prove the extent of the accuracy of the two models in predicting the financial condition of Islamic Commercial Banks and the potential for manipulation of their financial statements.

REFERENCES

Afiqoh, L., & Laila, N. (2018). Pengaruh Kinerja Keuangan Terhadap Risiko Kebangkrutan Bank Umum Syariah Di Indonesia (Metode Altman Z-Score Modifikasi). *Jurnal Ekonomi Dan Bisnis Islam*, *4*(2).

Aisyah, E. N., Zuraidah, Z., & Maulayati, R. R. (2021). Risk Mitigation of Covid-19 Pandemic in Baitul Maal Wat Tamwil. *Atlantis Press*, *529*, 691–697. https://api.semanticscholar.org/CorpusID:235555667

Altman, E. I. (2000). Predicting Financial Distress Of Companies: Revisiting The Z-Score And Zeta ® MODELS. *Journal of Banking & Finance*, *1*, 1–54. https://pages.stern.nyu.edu/~ealtman/Zscores.pdf

Andrew, A., Candy, C., & Robin, R. (2022). Detecting Fraudulent Of Financial Statements Using Fraud S.C.O.R.E Model AndS.C.O.R.E.l Distress. *International Journal of Economics, Business and Accounting Research (IJEBAR)*. https://apI.J.E.B.A.R.nticscholar.org/CorpusID:253334552

Bakhtiar, F., Munir, M., & Qasas, A. Al. (2018). Deteksi Kebangkrutan pada Industri Asuransi Syariah di Indonesia. *Ihtifaz: Journal of Islamic Economics, Finance, and Banking*. https://api.semanticscholar.org/CorpusID:170013672

Beneish, M. D. (1999). The Detection of Earnings Manipulation. *Financial Analysts Journal*, *55*(5), 24–36. https://doi.org/10.2469/faj.v55.n5.2296

Citra Pertiwi, J., Oktavia, R., Amelia, Y., & Lampung, U. (2023). Analisis perbandingan metode pendeteksian kecurangan keuangan menggunakan Altman Z-Score, Beneish M-Score, dan Springate. *Jurnal Ilmiah Akuntansi Dan Keuangan*, *5*(6). https://journal.ikopin.ac.id/index.php/fairvalue

Dahmash, F. N., Alshurafat, H., Hendawi, R., Alzoubi, A. B., & Al Amosh, H. (2023). The Retained Earnings Effect oFirm'sFirm's Market Value: Evidence from Jordan. *International Journal of Financial Studies*, *11*(3). https://doi.org/10.3390/ijfs11030089

Darmawan, Z. C., & Ridlwan, A. A. (2018). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Nasabah

Perbankan Syariah. *Al-Tijary*. https://api.semanticscholar.org/CorpusID:158356963

Dinasmara, C. K., & Adiwibowo, A. S. (2020). Deteksi Kecurangan Laporan Keuangan Menggunakan Beneish M – Score Dan Prediksi Kebangkrutan Menggunakan Altman Z – Score (Studi Empiris pada Perusahaan yang Termasuk dalam Indeks LQ – 45 Tahun 2016 – 2018). *Diponegoro Journal of Accounting*, *9*(3), 1–15. https://ejournal3.undip.ac.id/index.php/accounting/article/view/29062

Febriana, T. (2014). Studi Penerapan Inovasi Teknologi Informasi Dengan Metode Technology Watch And Competitive Intelligent (TW-CI). *Comtect*, *5*(1), 350–360.

Febrian, D., Hernawati, & Erawati, W. (2022). Analisis Kebangkrutan Dengan Model Grover (G-Score) Dan Springate (S-Score) Pada Bank Umum Syari'ah Di Indonesia. *Kasta : Jurnal Ilmu Sosial, Agama, Budaya Dan Terapan*. https://api.semanticscholar.org/CorpusID:255148824

Fhiqi, A., & Triani, N. N. (2019). *Fraudulent Financial Reporting Detection Using Beneish M-Score Model In Public Companies In 2012-2016*. https://api.semanticscholar.org/CorpusID:198681035

Heningtyas, O. S., & Widagdo, A. K. (2019). Bank loan loss provisions research: A review of the empirical literature. *Jurnal Keuangan Dan Perbankan*, *23*(2). https://doi.org/10.26905/jkdp.v23i2.2835

Hidayatullah, A., & Sulhani, S. (2018). Pengaruh Manipulasi Laporan Keuangan dan Karakteristik Chief Financial Officer terhadap Ketepatwaktuan Pelaporan Keuangan dengan Kualitas Audit Sebagai Variabel Pemoderasi. *Jurnal Dinamika Akuntansi Dan Bisnis*, *5*(2), 117–136. https://doi.org/10.24815/jdab.v5i2.10872

IAI. (2007, June 27). *Pernyataan Standar Akuntansi Keuangan 101: Penyajian Laporan Keuangan Syariah*. Ikatan Akuntan Indonesia. https://web.iaiglobal.or.id/assets/files/file_sak/exposure-draft/01_ED_PSAK_101_Penyajian_Laporan_Keuangan_Syariah.pdf

Indra, Y. A., & Yustati, H. (2022). The role of Islamic financial institutions in facing socio-economic problems during the covid-19 pandemic. *NUsantara Islamic Economic Journal*, *1*(2), 194–208. https://doi.org/10.34001/nuiej.v1i2.252

Irianto, G., & Novianti, N. (2018). *Dealing with Fraud* (A. K. Annuwar, Ed.; 1st ed.). UB Press.

Iskandar,U.B.., Ramadhan, Muh. S., Mulyati, M., & Adhim, C. (2022). Income Smoothing Practices at Sharia Banks: An Overview in Islamic Business Ethics. *Journal of Business and Management Review*, *3*(3), 191–207. https://doi.org/10.47153/jbmr33.3112022

Khaira Sihotang, M., & Hasanah, U. (2021). Islamic Banking Strategy In Facing The New Normal Era During The Covid 19. *Proceeding International Seminar on Islamic Studies*, *2*(1), 479–486.

Khan, M. B., Conteh, S., Ghafoorzai, S. A., Mohtashem, M. M. J., & Hai, A. (2021). Justifying the Need for Smoothing Tools by Islamic Banks. *El-Barka: Journal of Islamic Economics and Business*, *4*(1), 18–41. https://doi.org/10.21154/elbarka.v4i1.2446

Khan, T. N. (2022). Islamic banks web-marketing during the Covid-19 crisis. *Indonesian Journal of Social Sciences*, *14*(1), 1–13. https://doi.org/10.20473/ijss.v14i1.34040

Khasanah, R., Azizah, N., Pernamawati, A. M., Bahtiar, Moh. I. A., & Arumania, A. (2023). Does Banking Digitization Reduce Non-Performing Financing in Sharia Commercial Banks? *International Conference on Islamic Economic (ICIE)*, *2*(2), 174–18I.C.I.E.ttps://doi.org/10.58223/icie.v2i2.265

Lubis, F. H., Pramono, S. E., & Anwar, S. (2021). Income Smoothing Use Financing Loss Provision In IndonesiMalaysia'sysia's Islamic Banks Postgraduate Lecturers of Intitute Teknologi dan Bisnis Ahmad Dahlan Jakarta. *International Journal Of Science*, *2*(1), 127–144. http://ijstm.inarah.co.id

Mai, M. U., Nansuri, R., & Setiawan, S. (2024). Ownership structure, board characteristics, and performance of Indonesian Islamic rural banks. *International Journal of Islamic and Middle Eastern Finance and Management*. https://api.semanticscholar.org/CorpusID:267450336

Marbun, E. (2022). Analisis Prediksi Kebangkrutan Dengan Altman Z-Score Dan Deteksi Kecurangan Laporan Keuangan Dengan Beneish M-Score Pada Perusahaan Asuransi. *Jurnal Cafetaria*. https://api.semanticscholar.org/CorpusID:254356184

Meilani, L., Listiyanti, H., Safitri, R. D., & Mahfudz El-Fath, H. (2023). Does Diversification and Restructuring Reduce Non-Performing Financing? *Journal of Business Management and Islamic Banking*, *02*(2), 163–172. https://doi.org/10.14421/jbmib

Mohamed, N., & Handley-Schachler, M. (2015). Roots of Responsibilities to Financial Statement Fraud Control. *Procedia Economics and Finance*, *28*, 46–52. https://doi.org/10.1016/s2212-5671(15)01080-1

Muharrami, R. S., & Sinta, S. (2018). Analisis Prediksi Kebangkrutan dan Rasio Keuangan Bank Umum Syariah dengan Metode Altman Z-Score pada Tahun 2011-2015. *Ihtifaz: Journal of Islamic Economics, Finance, and Banking*. https://api.semanticscholar.org/CorpusID:169367460

Narsa, N. P. D. R. H., Afifa, L. M. E., & Wardhaningrum, O. A. (2023). Fraud Triangle and Earnings Management Based on The Modified M-score: A study on Manufacturing Company in Indonesia. *Heliyon*, *9*(2). https://doi.org/10.1016/j.heliyon.2023.e13649

OJK. (2018). *Penyelenggaraan Layanan Perbankan Digital Oleh Bank Umum*. Otoritas Jasa Keuangan; Otoritas Jasa Keuangan. https://www.ojk.go.id/id/regulasi/Documents/Pages/Penyelenggaraan-Layanan-Perbankan-Digital-oleh-Bank-Umum/POJK%2012-2018.pdf

OJK. (2024). *Pengaturan dan Pengawasan Bank*. Otoritas Jasa Keuangan. https://ojk.go.id/id/kanal/perbankan/ikhtisar-perbankan/Pages/Peraturan-dan-Pengawasan-Perbankan.aspx

Pratama, R., & Puspitasari, W. (2022). Pengaruh Financial Distress Terhadap Kecurangan Laporan Keuangan. *Jurnal Ekonomi Trisakti*, *2*(2), 703–718. https://doi.org/10.25105/jet.v2i2.14555

Putra, Y. P. (2021). Perbandingan Metode Altman Z-Score, Beneish M-Score-Data Mining Dan Springate Dalam

Mendeteksi Fraudulent Financial Reporting (Studi Empiris Perusahaan Manufaktur Tahun 2014-2018). *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, *9*(1), 81–94. https://doi.org/10.37676/ekombis.v9i1.1222

Rizwan, M. S., Ahmad, G., & Ashraf, D. (2022). Systemic risk, Islamic banks, and the COVID-19 pandemic: An empirical investigation. *Emerging Markets Review*, *51*. https://doi.org/10.1016/j.ememar.2022.100890

Shara, Y., Wulandari, S., & Pane, A. S. (2022). Pengaruh Kinerja Keuangan Terhadap Profitabilitas Bank Umum Syariah Di Indonesia. *'l-Bay': Journal of Sharia Economic and Business*, *1*(1). https://doi.org/10.24952/bay.v1i1.5768

Sulton, F. A., Ardira, G. A., & Hersugondo, H. (2022). Pengaruh Rasio Kredit Bermasalah Terhadap Profitabilitas Bank Umum Selama Pandemi Covid-19: Kasus Indonesia. *Kompartemen : Jurnal Ilmiah Akuntansi*. Https://Api.Semanticscholar.Org/Corpusid:247213852

Syafrida, I., & Aminah, I. (2015). Faktor Perlambatan Pertumbuhan Bank Syariah Di Indonesia Dan Upaya Penanganannya. *Ekonomi Dan Bisnis*, *14*(1), 7–20. Https://Media.Neliti.Com/Media/Publications/13473-Id-Faktor-Perlambatan-Pertumbuhan-Bank-Syariah-Di-Indonesia-Dan-Upaya-Penanganannya.Pdf

Syahla, N., & Anggraini, T. (2023). Pengaruh Dana Syirkah Temporer Terhadap Profitabilitas Dengan Risiko Pembiayaan Sebagai Variabel Intervening. *Jurnal Ilmiah Ekonomi Islam*, *9*(1), 915–923. Https://Doi.Org/10.29040/Jiei.V9i1.7964

Syilviana, & Rachmawati, T. (2016). *Analisis Kebangkrutan Dengan Menggunakan Model Altman Z-Score Pada Perusahaan Asuransi Yang Go Public Di Bursa Efek Indonesia (Periode Tahun 2010 – 2013)*. Https://Api.Semanticscholar.Org/Corpusid:113648202

Tanusdjaja, H., & Kurniawan, F. M. (2018). Analisis Komparasi Metode Altman Z-Score-Financial Ratio Dan Metode Beneish M-Score Model-Data Mining Dalam Mendeteksi Fraudulent Financial Reporting. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, *2*(1), 14–28.

Vahlevi, R., & Indra Vitaharsa, L. (2022). Pengaruh Kualitas Layanan Mobile Banking Terhadap Kepuasan Dan Loyalitas Nasabah Di Bank Bni Kcu Daan Mogot. *Sosains Jurnal Sosial Dan Sains*, *2*(9), 1060–1070. http://sosains.greenvest.co.id

Wijayanti, F., Laela, S. F., & Diyanty, V. (2020). Education strategy misfit, board effectiveness and Indonesian Islamic bank performance. *Journal of Islamic Accounting and Business Research*, *11*(4), 929–944. https://www.emerald.com/insight/content/doi/10.1108/JIABR-04-2017-0052/full/html

Yolanda, V., Mas'ud, R., & Hasanah, S. M. (2022). Pengaruh Teknologi Keuangan Dan Kualitas Layanan Digital Terhadap Kepuasan Nasabah Pada Bank Syariah Indonesia Kcp Masbagik. *Iqtishaduna*. https://api.semanticscholar.org/CorpusID:251513995

Yuningsih, Y., Suryani, S., & Azim, M. F. (2022). Hubungan Digital Banking dan Kinerja Pelayanan Bank Syariah Terhadap Upaya Customer Retention di Masa Pandemi Covid-19 Pada Bank Syariah Indonesia (BSI) Kantor

Cabang Perwakilan (KCP) Kota Serang. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*. https://api.semanticscholar.org/CorpusID:255289693