# The Moderating Role of the Sharia Supervisory Board in Detecting Fraud Opportunities in Islamic Banking Financial Reports Using the Fraud Hexagon Approach

Zainuddin<sup>1</sup>, Muhammad Ikram. S<sup>2</sup>, Wahyu Hasdi<sup>3</sup>, Nurun Nuraini<sup>4</sup>, Didin Purniawan<sup>5</sup>

Faculty of Islamic Economics and Business, IAIN Palopo, Indonesia

Email: zainuddin@iainpalopo.ac.id,muhammadikrams@iainpalopo.ac.id,2204040005@iainpalopo.ac.id,2204040014@iainpalopo
\_ac.id,2204040047@iainpalopo.ac.id

#### Abstract

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This study aims to analyze the influence of elements in the fraud hexagon on financial statement fraud in Islamic banking in Indonesia, as well as to evaluate the moderating role of the Sharia Supervisory Board. This study uses a quantitative approach with a panel data regression analysis method that includes 37 observations from the annual reports of Islamic commercial banks registered with the Financial Services Authority (OJK) during the 2019–2023 period. Financial statement fraud is detected using the Beneish M-Score model, with independent variables including pressure, opportunity, rationalization, ability, arrogance, and collusion, and the moderating variable of the Sharia Supervisory Board. The results show that pressure, opportunity, and rationalization have a significant effect on financial statement fraud, while ability, arrogance, and collusion have no effect. In addition, the Sharia Supervisory Board is able to moderate the influence of pressure and opportunity, but is not effective in moderating other variables. These findings emphasize the importance of the active role of the Sharia Supervisory Board in strengthening Islamic corporate governance. This study provides practical contributions to financial institutions and regulators to improve the effectiveness of internal supervision and prevent financial statement manipulation. Further studies are recommended to expand the scope of variables and explore qualitative approaches to enrich the understanding of the factors driving fraud in the Islamic financial system.

**Keywords**: financial reporting fraud, hexagon fraud, Beneish M-Score, sharia supervisory board, sharia banking.

### **INTRODUCTION**

Financial reports are one of the most important aspects of a company that provides a complete picture of the economic conditions and performance of a company. PSAK 1 regulates the presentation of financial reports that provide structured information about the financial position and performance of an entity. Financial reports are a very important tool for companies and various interested parties.(Afzali, 2023; Dambra et al., 2023; Francis, 2023). Financial reports are like a window that allows us to peek into the financial "kitchen" of a company, see what is happening inside and assess its financial health.(Djamil & Anggraini, 2023; Liu et al., 2023; Suarni & Amelia, 2022; Uwah et al., 2023). Therefore, by implementing best practices in accounting and auditing, companies can strengthen stakeholder trust, support better decisions, and ensure that financial reports reflect the actual conditions appropriately and accurately.(Affes & Jarboui, 2023).

However, when an organization has valuable assets such as cash, goods, information or services the risk of potential fraud can arise (Laudeciska et al., 2023). Fraudulent financial statements can be manipulated to have a convincing resemblance to those that do not contain fraud, and can appear in a variety of different forms. FurtherAchmad et al. (2023)revealed that

financial report manipulation often arises due to pressure from outside the organization. One form is financial report manipulation to increase profits, this action can be done by management or employees as an effort for the interests of the company, Dukić et al. (2023) The application of forensic accounting and auditing plays an important role in detecting and preventing fraud and maintaining the integrity of financial reporting.

Financial reporting fraud is the intentional misrepresentation of a company's financial condition achieved through misstatements or omissions of amounts or disclosures in the financial statements. (Soltani et al., 2023). Financial Statement Fraud, refers to intentional acts or omissions that cause material distortions in the financial statements. (Khamainy et al., 2022; Wang et al., 2022). Based on the surveyACFE 2024, fraud can be categorized into three main types, namely asset misappropriation, corruption, and manipulation of financial reporting.

Table 1

NO	INDUSTRY	CASE	PERCENTAGE	PERCENTAGE OF FINANCIAL STATEMENT FRAUD	NUMBER OF FINANCIAL STATEMENT FRAUD CASES
1	Banking and Financial Services	305	22.26%	5%	15.25
2	Manufacturin g	175	12.77%	6%	10.5
3	Government and Public Administratio n	170	12.41%	4%	6.8
4	Health care	117	8.54%	1%	1.17
5	Energy	78	5.69%	4%	3.12
6	Retail	78	5.69%	0%	0
7	Construction	73	5.33%	10%	7.3
8	Education	70	5.11%	0%	0
9	Insurance	69	5.04%	9%	6.21
10	Technology	65	4.74%	3%	1.95
11	Transportatio n and Warehousing	60	4.38%	2%	1.2
12	Religious, Charitable, or Social Services	58	4.23%	3%	1.74
13	Information	52	3.80%	2%	1.04
	TOTAL	<b>1,3</b> 70	100.00%	49%	56.28

Source: (ACFE, 2024)

The table above shows the most common types of schemes in the industry with more than 50 reported cases. ACFE 2024uncovering fraud in various industrial sectors. Banking and financial services led with 305 cases (22.26% of the total), with 5% of them being cases of financial reporting fraud. The manufacturing sector followed with 175 incidents (12.77%), with the proportion of financial reporting fraud reaching 6%. Government and public administration recorded 170 cases (12.41%), 4% of which were related to incorrect financial reporting. The health care sector recorded 117 incidents (8.54%), but only a small portion (1%) were related to financial reporting fraud. Interestingly, the construction and insurance sectors showed the highest percentage of financial reporting manipulation, 10% of 73 cases and 9% of 69 cases respectively. Overall, almost half (49%) of the total cases, with an estimated 56.28 cases identified as financial reporting fraud.

According to the publication Asia-Pacific Occupational Fraud 2024: A Report to the Nations released by the Association of Certified Fraud Examiners (ACFE), Indonesia ranked third in the Asia-Pacific region with the highest number of fraud cases in 2024. The most dominant types of fraud in Indonesia involve corruption (64%), misuse of state and corporate assets (28.9%), and fraud in financial reporting (6.7%). The data presented in the table strengthens the view that the banking industry is highly vulnerable to fraud.

Fraudulent practices have been a problem inherent in the banking world since its inception, including Islamic Financial Institutions that reflect Islamic principles. This phenomenon is a challenge that is constantly faced in various aspects of business activities, both in the past and today. (Katsirin, 2024). Given this, continuous efforts are needed to improve systems and build effective anti-fraud strategies, with the ultimate goal of reducing fraud incidents. (Citterio & King, 2023; Suh & Shim, 2020).

The increasing incidents of fraud in the Islamic banking sector raises the need for an effective detection system to identify potential fraud in the presentation of financial data. (Vousinas, 2019) has developed a fraud detection model in financial reports called the fraud hexagon model. This model is a refinement of the elements of the fraud pentagon theory which only consists of 5 elements, namely pressure, opportunity, rationalization, capability, arrogance, with the addition of the collusion factor.

The application of the fraud hexagon is one of the broader approaches in analyzing factors that contribute to the tendency for financial report manipulation to occur. Miftahul et al., (2021); Vousinas, (2019) Maharanti et al. (2024). The Beneish M-Score model is a useful tool for identifying companies that may be manipulating the numbers in their financial statements. (Kukreja et al., 2020; Liu et al., 2023; Sawarni et al., 2023). By implementing the principles of good corporate governance, especially through the role of the company's sharia supervisory board, the risk of fraud in financial reporting can be reduced. The board is tasked with carrying out comprehensive and/or specific supervision in accordance with the provisions contained in the articles of association of sharia banking.

This research is important to do considering that fraud continues to occur, both corruption and fraud in financial reports themselves. Previous research has produced detection models that reveal various factors that can trigger dishonest financial reporting. Based on this, there is a novelty in this study, namely emphasizing the moderation of the sharia supervisory board as a stage of good corporate governance with a fraud hexagon approach.

#### **METHODS**

### A. Research Approach

This study uses a quantitative approach by applying panel data regression analysis. Panel data regression analysis was chosen because this method is able to handle longitudinal data (cross-sectional and time-series), so that it can identify more stable patterns or relationships and control unobserved variables (unobserved heterogeneity). This method is appropriate for evaluating the influence of independent variables on dependent variables in a certain period of time, in this case 2019-2023, as well as seeing the moderating role of the sharia supervisory board.

Panel data regression is considered the best method compared to cross-sectional or time series regression because it considers the characteristics of each entity (Islamic bank) individually. The selection of this approach is based on the method's ability to control disturbance variables that are fixed in each Islamic bank (fixed effects) or random (random effects).

### B. Population, Sample, and Sampling Techniques

The population of this study is all Islamic Commercial Banks registered with the Financial Services Authority (OJK) during the period 2019-2023. The sample was determined using a purposive sampling technique with the following criteria:

- 1. Sharia banks registered with OJK in the 2019-2023 period.
- 2. Provide complete annual reports during the research period.
- 3. Have relevant data for independent and moderating variable analysis, including sharia supervisory board data.

### C. Data Types and Sources

The data used in this study are secondary data obtained from the annual reports of Islamic banks accessed from the BEI website, the official websites of each bank, and other relevant public sources. The use of secondary data was chosen because this data is considered to be able to represent the financial and operational conditions of Islamic Commercial Banks completely and can be accessed for the desired period. However, the limitation of using secondary data is the inflexibility in obtaining data that may be more specific to the research question. Primary data is considered unnecessary because the study focuses on the analysis of published financial reports.

#### D. Research Variables and Operational Definitions

Measurement of variables is done by applying the established formula for each variable, which is described as follows:

# 1) Dependent Variable (Financial Reporting Fraud)

This study uses the Beneish M-Score model to detect fraud in financial reporting. If the Beneish M-Score value exceeds 2.22, it can be assumed that the financial report has likely been manipulated.(Rachmi et al., 2020).

- 2) Independent Variables
- a) Pressure (X1)

Pressure in this study is proxied by financial stability by calculating changes in total assets.

$$ACHANGE = \frac{(Total \ aset \ t-Total \ aset \ t-1)}{Total \ aset \ t}$$

# b) Chance (X2)

Opportunities or chances are defined using the variable "nature of industry" which refers to conditions that describe a company's optimal situation.

$$\frac{Receivable}{RECEIVABLES} = \frac{Receivable}{sales} - \frac{Receivable (t-1)}{sales (t-1)}$$

#### c) Rationalization (X3)

In this study, rationalization is associated with audit opinion (AO) measured by a dummy variable. If receiving an unqualified opinion with an explanation during the period 2019-2023, it will be given a score of 1; conversely, if the company receives other types of opinions, it will be given a code of 0.

### d) Ability (X4)

In this study, the ability is associated with the change of the company's directors (DCHANGE), which is measured by a dummy variable. If there is a change of directors during the 2019-2023 period, then it will be given a score of 1; conversely, if there is no change, it will be given a score of 0.

#### e) Arrogance (X5)

In the context of this study, arrogance is measured through an evaluation of the number of CEO images or photos presented in published annual reports.

#### f) Collusion (X6)

This variable is proxied by the audit fee variable (AUDF) and is measured using the natural logarithm (Ln) (Aviantara, 2021).

#### 3) Moderation Variable (Z)

In this study, a moderating variable was used, namely the Sharia Supervisory Board, which is calculated based on the number of Sharia Supervisory Board members in the company, as follows:

$$DK = \sum$$
 Sharia Supervisory Board

#### E. Data Analysis Techniques

#### 1) Classical Assumption Test

This test is useful to test whether there is a violation of classical assumptions in a regression model so that the results of the regression model become the Best Linear Unbiased Estimator (BLUE). The tests used are Multicollinearity Test, normality test, heteroscedasticity test, and autocorrelation test.

### a. Multicollinearity Test

This test aims to detect high correlation between independent variables. High multicollinearity can interfere with the interpretation of the regression coefficient, because it is difficult to determine the individual influence of the independent variables. Multicollinearity tests can be done by looking at the Variance Inflation Factor (VIF) value. If the VIF value is above 10.00, this indicates high multicollinearity. Conversely, if the VIF value is below 10.00, it indicates no multicollinearity. This test only detects linear correlation between variables. If there is a non-linear relationship between variables, this test may not detect the problem.

### b. Normality Test

The normality test aims to check whether the residuals are normally distributed, which is one of the basic assumptions in classical linear regression. If the residual distribution is close to normal, the parameter estimates will be more reliable and the interpretation of the regression results will be more valid. The PP (Probability-Probability) Plot graph shows how close the residual data distribution is to the theoretical normal distribution. In the PP Plot, the residual points will be sorted by their predicted values and plotted against the theoretical normal distribution. If the residuals are normally distributed, the points will follow a straight line that stretches from the lower left corner to the upper right corner of the graph. If the points on the PP Plot spread around the straight line without a clear pattern, this indicates that the residuals are close to a normal distribution. However, if the points deviate a lot from the line or follow a curved pattern, this indicates a deviation from normality.

### c. Heteroscedasticity Test

The heteroscedasticity test aims to detect whether there is a residual variance that is not constant throughout the value of the independent variable. High heteroscedasticity will make the regression model inefficient because the parameter estimates can be biased. The scatter plot is done by mapping the residual values to the predicted values of the regression model. In this graph, the X-axis shows the predicted values, while the Y-axis shows the residual values. In a model that does not experience heteroscedasticity, the points will be spread randomly and do not form a particular pattern. If the residual points in the scatter plot are evenly distributed and do not form a particular pattern, then the assumption of homoscedasticity (constant residual variance) is met.

Conversely, if there is a clear pattern, such as a cone shape or an elongated pattern, this indicates heteroscedasticity.

#### d. Autocorrelation Test

This test is performed to detect the presence of correlation between adjacent residuals. Autocorrelation can indicate that there is unexplained information in the model. The Durbin-Watson test (d) is usually used to detect autocorrelation. If the d value is between the upper limit (du) and 4-du, that is, du < d < 4-du, then there is no indication of autocorrelation. The Durbin-Watson test is more effective for sequential data (such as time series data). In unsequential data or data with complex patterns, this test may be less accurate.

### 2) Analysis Model

The hypothesis was tested using multiple linear regression and moderated linear regression using SPSS version 26. The regression model in this study is shown in the equation:

a)Equation model for multiple regression analysis

$$Y = \alpha 0 + \alpha 1x1 + \alpha 2x2 + \alpha 3x3 + \alpha 4x4 + \alpha 5x5 + \alpha 6x6 + e...$$
 (1)

b) Equation model for moderated regression analysis (MRA)

$$Y = \alpha 0 + \alpha 1Z + \alpha 2x1 * Z + \alpha 3x2 * Z + \alpha 4x3*Z + \alpha 5x4 * Z + \alpha 6x5 * Z + \alpha 7x6 * Z + e... (2)$$

#### Information:

Y = Financial reporting fraud

X1 = Pressure

X2 = Chance

X3 = Rationalization

X4 = Ability

X5 = Arrogant

X6 = Collusion

X1\*Z = Pressure interaction with the board

X2\*Z = Opportunity interaction with the sharia supervisory board

X3\*Z = Interaction of rationalization with the sharia supervisory board

X4\*Z = Interaction of ability with the sharia supervisory board

X5\*Z = Arrogant interaction with the sharia supervisory board

X6\*Z = Collusive interaction with the sharia supervisory board

 $\alpha 0 = Constant$ 

a1-a7 = Regression coefficient

e = error

### F. TestingHypothesis

### a) Simultaneous Regression Coefficient Test (F Test)

This test is conducted with the aim of tracing whether all independent variables have a simultaneous (together) influence on the dependent variable. The test method is by comparing if the F-count value > F-table or the probability of the F-count value <0.05 means that the independent variables have a simultaneous impact on the dependent variable.

### b) Partial Regression Test (t-Test)

This test is conducted to test the impact of independent variables in influencing dependent variables partially. The method is to compare the significance value of each independent variable ( $\alpha = 0.05$ ). The research hypothesis can be accepted if the significance value of t  $\leq 0.05$  or t count > t table.

### c) Coefficient of Determination (R2)

This study uses adjusted R2 which ranges from 0 to 1. Values that are closer to one indicate the model's ability to explain the dependent variable better.

#### G. Research Limitations

This study has several limitations, namely the use of secondary data which limits flexibility in obtaining relevant additional data, does not include control variables so that the results of this study do not accommodate external factors in influencing the results, and this study is limited only to the context of Islamic banking in Indonesia so that it cannot be generalized to other sectors or countries.

#### RESULTS AND DISCUSSION

#### Population and Sample Description

This study uses data from annual reports of Islamic banks registered with the Financial Services Authority (OJK). This study covers Islamic banks that were active in the period 2019-2023, with several annual reports excluded from the sample due to incomplete data. The following table shows the population and sample of Islamic banks used in this study.

Table 5
Population and Sample

Information	Amount
Sharia Banking registered with OJK	10
Year	5
Population Size	50
Incomplete annual report	(13)

Number of Samples (n) 37

Source: Primary Data Processing, 2024

# **Descriptive Analysis**

Table 6
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Reporting Fraud	37	-6.03	-,90	-2.5865	,79709
Pressure	37	-,15	<b>,</b> 50	,1011	,11155
Ability	37	-8.12	4.96	-,1938	1.68753
Arrogance	37	1.00	28.00	5,7027	5.59198
Collusion	37	19.25	22.45	20,7697	,79524
Sharia Supervisory Board	37	2.00	4.00	3,3243	2.06173
Valid N (listwise)	37				

Source: Primary Data Processing, SPSS

Meanwhile, several variables that use dummy variables are presented in Table 3.

**Table 7**Dummy Variable

Variables	Amount	Group	Percentage
D	34	1	92%
Rationalization	3	0	8%
	28	1	76%
Ability	9	0	24%

Source: Primary Data Processing, SPSS

# **Classical Assumption Test**

a. Multicollinearity Test

Table 8

Multicollinearity Test

Variables	VIF	Information
Pressure (X1)	1,654	No Multicollinearity
Chance (X2)	1,795	No Multicollinearity
Rationalization (X3)	2,049	No Multicollinearity
Ability (X4)	1,049	No Multicollinearity
Arrogance (X5)	2,621	No Multicollinearity
Collusion (X6)	2,654	No Multicollinearity

Sharia Supervisory Board (Z)

3,229

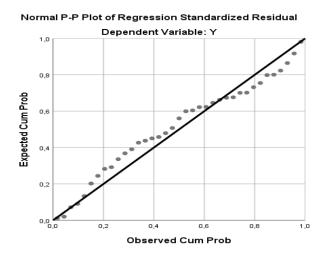
No Multicollinearity

Source: Primary Data Processing, SPSS

Based on the table, it can be concluded that the regression model containing independent variables does not contain multicollinearity problems. This can be seen from the Variance Inflation Factor (VIF) values of all independent variables, namely Pressure (X1), Opportunity (X2), Rationalization (X3), Ability (X4), Arrogance (X5), Collusion (X6), and Sharia Supervisory Board (Z), all of which have VIF values <10.00. Thus, it can be concluded that there are no symptoms of multicollinearity.

### b. Normality Test

Figure 2
Normal Probability Plot

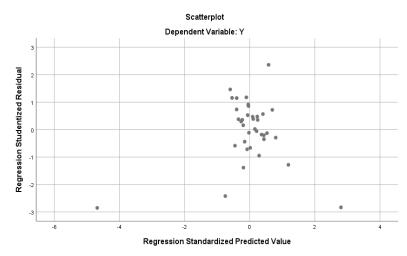


Source: Primary Data Processing, SPSS

Based on the Normal Probability Plot graph above, it can be seen that the data points are spread around the diagonal line and follow the pattern of the line. The data distribution pattern shows a normal distribution, which means that this regression model meets the requirements of the normality assumption.

### c. Heteroscedasticity Test

Figure 3 Scatterplot Diagram



Source: Primary Data Processing, SPSS

From the scatterplot diagram above, it can be seen that the data is randomly distributed and does not form a particular pattern. Thus, it can be concluded that the regression model used meets the assumption of no heteroscedasticity..

### d. Autocorrelation Test

Table 9
Autocorrelation Test

Model	Durbin-Watson
1	1,933

a. Predictors: (Constant), Pressure, Opportunity, Rationalization,

Ability, Arrogance, Collusion, Sharia Supervisory Board

b. Dependent Variable: Financial Report Fraud

Source: Primary Data Processing, SPSS

Based on Table 3 above, it shows that the Durbin-Watson value is between the upper limit (du) and 4-du, namely du < d < 4-du or 1.870 < 1.933 < 2.130. So it can be concluded that there is no autocorrelation.

- 3. Hypothesis Testing
- a. Simultaneous Regression Coefficient Test (F Test)

Table 10 F Test

	Sig.
Regression	,012b
Residue	

Total

a. Dependent Variable: Financial Report Fraud

b. Predictors: (Constant), Pressure, Opportunity,

Rationalization, Ability, Arrogance, Collusion, Sharia

Supervisory Board

Source: Primary Data Processing, SPSS

Based on table 6, a significance value of 0.012 is obtained. With a significance value of less than 0.05 (0.012 < 0.05), this indicates that the independent variables, namely Pressure (X1), Opportunity (X2), Rationalization (X3), Ability (X4), Arrogance (X5), Collusion (X6), and the Sharia Supervisory Board (Z), simultaneously have a significant influence on the dependent variable, namely Financial Report Fraud (Y).

#### b. Partial Regression Test (T-Test)

Table 11 T-test

	В	Sig.
(Constant)	-1,030	,025
Pressure (X1)	-2,484	,000
Chance (X2)	,272	,000
Rationalization (X3)	,937	,035
Ability (X4)	,051	,858
Arrogance (X5)	,015	,645
Collusion (X6)	-,112	,625
Sharia Supervisory	-,035	,914
Board (Z)	-	

a. Dependent Variable: Financial Report Fraud

Source: Primary Data Processing, SPSS

Based on the table above, the linear regression equation is as follows:

$$Y = -1,030 + -2,484x1 + 0,272x2 + 0,937x3 + 0,051x4 + 0,015x5 + -0,112x6 + -0,035z$$

Based on table 7 above, the coefficient for the Pressure variable (X1) shows a value of -2.484 with a significance below 0.05 (0.000 <0.05), it can be concluded that the Pressure variable has an effect on Financial Report Fraud (Y). Thus, the first hypothesis (H1) proposed in this study, namely, "Pressure has an impact on financial report fraud" is accepted.

The coefficient of the Opportunity variable (X2) shows a value of 0.272 with a significance below 0.05 (0.000 <0.05), it can be concluded that the Opportunity variable has an effect on Financial Report Fraud (Y). Thus, the Second Hypothesis (H2) proposed in this study where, "Opportunity has an impact on financial report fraud" is accepted.

The coefficient of the Rationalization variable (X3) shows a value of 0.937 with a significance below 0.05 (0.035 < 0.05), it can be concluded that the Rationalization variable has

an effect on Financial Report Fraud (Y). Thus, the Third Hypothesis (H3) proposed in this study, where, "Rationalization has an impact on financial report fraud" is accepted.

The coefficient of the Ability variable (X4) shows a value of 0.051 with a significance above 0.05 (0.859 > 0.05), it can be concluded that the Ability variable does not affect Financial Report Fraud (Y). Thus, the Fourth Hypothesis (H4) proposed in this study where, "Ability has an impact on financial report fraud" is rejected.

The coefficient of the Arrogance variable (X5) shows a value of 0.015 with a significance above 0.05 (0.645 > 0.05), it can be concluded that the Arrogance variable has no effect on Financial Report Fraud (Y). Thus, the Fifth Hypothesis (H5) proposed in this study, where, "Arrogance has an impact on financial report fraud" is rejected.

The coefficient of the Collusion variable (X6) shows a value of -0.112 with a significance above 0.05 (0.625 > 0.05), it can be concluded that the Collusion variable has no effect on Financial Report Fraud (Y). Thus, the Fifth Hypothesis (H5) proposed in this study, where, "Collusion has an impact on financial report fraud" is rejected.

The coefficient of the Sharia Supervisory Board variable (Z) shows a value of -0.035 with a significance above 0.914 > 0.05, meaning that the Sharia Supervisory Board variable does not have a partial effect on Financial Report Fraud (Y).

Table 12 T-test model 2

	В	Sig.
(Constant)	,143	,014
Z	,205	,286
X1*Z	-1,785	,001
X2*Z	,137	,000
X3*Z	,301	,143
X4*Z	,037	,791
X5*Z	,006	,548
X6*Z	,053	,504

a. Dependent Variable: Financial Report Fraud

Source: Primary Data Processing, SPSS

Based on the table above, the linear regression equation is as follows:

$$Y = 0.143 + 0.205Z + -1.785x1 * Z + 0.137x2 * Z + 0.301x3 * Z + 0.037x4 * Z + 0.006x5 * Z + 0.053x6 * Z$$

Based on table 12 above, the significance value of the Pressure variable (X1) influenced by the Sharia Supervisory Board is 0.001, which is smaller than the significance level of 0.05 (0.001 < 0.05). This shows that the Sharia Supervisory Board strengthens or weakens the impact of the Pressure variable on Financial Report Fraud. Therefore, the seventh hypothesis (H7) in this study is accepted.

The significance for the Opportunity variable (X2) moderated by the Sharia Supervisory Board was recorded at 0.000, which is also smaller than 0.05 (0.000 < 0.05). This means that the Sharia Supervisory Board has a moderating role in strengthening or weakening the influence of

the Opportunity variable on Financial Report Fraud, so that the eighth hypothesis (H8) is accepted.

With a significance value of 0.143 (0.143 < 0.05), the Rationalization variable moderated by the Sharia Supervisory Board shows a significant influence on Financial Report Fraud. This does not support the ninth hypothesis (H9), which states that the Sharia Supervisory Board plays a role in strengthening or weakening the impact of Rationalization.

For the Ability variable (X4), the significance value was recorded at 0.791, which is greater than 0.05 (0.791 > 0.05). This shows that the Ability moderated by the Sharia Supervisory Board does not have a significant effect on Financial Report Fraud, so the tenth hypothesis (H10) is rejected.

The Arrogance variable (X5) moderated by the Sharia Supervisory Board has a significance value of 0.548 (0.548 > 0.05), which is also greater than the significance limit of 0.05. Thus, the Sharia Supervisory Board does not moderate the effect of Arrogance on Financial Report Fraud, which means that the eleventh hypothesis (H11) is rejected.

The Collusion variable (X6) influenced by the Sharia Supervisory Board has a significance value of 0.504, also greater than 0.05 (0.504 > 0.05). This indicates that the Sharia Supervisory Board does not act as a moderating variable for the impact of Collusion on Financial Report Fraud, so the twelfth hypothesis (H12) is rejected.

Coefficient of Determination (R2)

Table 13
Test of Determination Coefficient of Model 1

Model	R Square	
	-	
1	,612	
a. Predictors: (Constant), P	ressure, Opportunity,	
Rationalization, Ability, Arrogance, Collusion, Sharia		
Supervisory Board		

Source: Primary Data Processing, SPSS

Based on the table above, the coefficient of determination (R-Square) value is recorded at 0.612 or 61.2%. This indicates that the variables Pressure, Opportunity, Rationalization, Ability, Arrogance, Collusion and Sharia Supervisory Board are able to explain 61.2% of the Financial Report Fraud variable, while the rest, which is 37.8%, is influenced by other variables not included in this research model.

Table 14
Test of Determination Coefficient of Model 1

Model	R Square
1	,472

a. Predictors: (Constant), Z, X1\*Z, X2\*Z, X3\*Z, X4\*Z, X5\*Z, X6\*Z

Source: Primary Data Processing, SPSS

Based on the table above, the coefficient of determination (R-Square) value is recorded at 0.472 or 47.2%. This indicates that the independence variables of the Pressure variable and the Sharia Supervisory Board, the Opportunity variable and the Sharia Supervisory Board variable, the Rationalization variable and the Sharia Supervisory Board variable and the Sharia Supervisory Board variable and the Sharia Supervisory Board variable, the Collusion variable and the Sharia Supervisory Board variable are able to explain 47.2% of the Financial Report Fraud variable, while the rest, which is 52.8%, is influenced by other variables not included in this research model.

#### DISCUSSION

### The Effect of Pressure on Financial Reporting Fraud

The results of this study indicate that pressure has a significant effect on financial statement fraud, in line with hypothesis H1. In the context of agency theory, conflicts of interest between owners (principals) and management (agents) often occur when management faces high pressure to meet profit targets or owner expectations. This study supports the findings of Achmad et al. (2023), which states that pressure from external parties, such as investors and regulators, can encourage management to commit fraud to maintain the company's image. In addition, The Last Airbender (2021) also shows that high pressure, especially in the banking sector, often drives management to take manipulative actions in financial reporting in order to meet stakeholder expectations. The fraud hexagon highlights that pressure, especially in the form of financial expectations and financial stability, is an important element that can trigger fraud in Islamic banking, where the demands to maintain the reputation of sharia increasingly add to the burden on management.

### The Influence of Opportunity on Financial Reporting Fraud

Opportunity is proven to have a significant influence on financial statement fraud, which supports hypothesis H2. Agency theory explains that weak internal control creates opportunities for management to make decisions that benefit them without the owner's knowledge. This is relevant to the fraud hexagon theory, which states that opportunities can arise when the internal control system in an organization is weak, allowing perpetrators to commit fraud without a high risk of being detected. This study is in line withGhaisani et al. (2022), which shows that companies with weak internal controls face a higher risk of fraud, because weak supervision opens up opportunities for individuals to abuse these loopholes. Humphrey et al. (2023) also stated that companies with ineffective supervisory structures are more vulnerable to fraud. In the context of Islamic banking, where transaction complexity is often high, opportunity is a major factor driving fraud, especially when internal controls are inadequate to mitigate such risks.

### The Effect of Rationalization on Financial Reporting Fraud

Rationalization is a justification mechanism that makes fraud perpetrators feel that their actions are acceptable, and this study shows that rationalization has a significant effect on financial statement fraud, in accordance with hypothesis H3. Agency theory states that

management can justify their manipulative actions by arguing to maintain the company's interests or achieve certain targets, even though it is contrary to the interests of the owners. This finding supports research byIzzati & Syofyan (2023), who found that rationalization plays a significant role in fraud, as it allows management to feel innocent or even justify manipulative actions in the interests of the company. The Driel (2019) also shows that rationalization is a justification often used by management to reduce guilt when committing fraud. The fraud hexagon identifies rationalization as one of the psychological factors that support fraud, and in the Islamic banking environment, where ethical standards are higher, rationalization is often used as a justification for manipulative actions that are deemed necessary to maintain company stability and meet stakeholder expectations.

# Ability Has No Effect on Financial Reporting Fraud

Hypothesis H4, which states that ability has an effect on financial statement fraud, was not proven in this study. Ability here refers to the individual's technical skills to exploit weaknesses in the system to commit fraud. According to the studyLastanti et al. (2022), ability becomes an important factor in fraud hexagon when individuals have the expertise to exploit internal control loopholes. However, the results of this study indicate that ability is not significant in Islamic banking, which may be due to the existence of a strict internal control system. In addition, the studyJohn Smith (2021)stated that internal supervision and the role of the sharia supervisory committee limit the space for individuals to use their technical skills in manipulating financial reports, so that the ability factor does not have a major impact on fraud in this context.

### Arrogance Has No Effect on Financial Report Fraud

Hypothesis H5, which states that arrogance has an effect on financial reporting fraud, was also not proven in this study. In this context, arrogance is measured through the number of photos or images of the CEO or company leader in the annual report. Arrogance is considered to arise when individuals in leadership positions feel the need to display many photos to stand out, which can reflect an attitude of superiority or immunity to supervision. According to Sevyiolanita et al. (2022), arrogance can be a driving factor for fraud because individuals feel they have a privileged position that is difficult to replace. However, in Islamic banking, strict supervision by the board of commissioners and commitment to Islamic principles seem to limit the effects of this arrogance. Afriani et al. (2023) shows that in organizations with a culture that emphasizes ethics and governance, arrogance will be more controlled, so that its use as a measure of fraud becomes less significant.

#### Collusion Has No Impact on Financial Reporting Fraud

Hypothesis H6, which states that collusion has an effect on financial statement fraud, was also not proven in this study. Collusion is a form of cooperation between two or more parties to carry out manipulation together, which can complicate fraud because it involves more than one individual or entity. According to the studyThe Last Supper (2022), collusion can increase the complexity of fraud due to coordination between several parties. However, in Islamic banking, supervision by the sharia supervisory board and the principle of transparency that is strongly applied limit the opportunities for collusion. Carla & Pangestu (2021) revealed that in organizations that implement strict governance, collusion becomes a less significant factor because of the existence of strong controls to monitor collaborative activities that may lead to fraud.

#### Sharia Supervisory Board's Moderation of Pressure

Hypothesis H7, which states that the sharia supervisory board can moderate in

strengthening or weakening the influence of pressure on financial reporting fraud, is proven in this study. In agency theory, the sharia supervisory board acts as an additional control mechanism, which represents the interests of the owner (principal) to supervise so that management (agent) does not violate sharia principles in their financial activities. This study is in line with the findings of Afriani et al. (2023), which shows that active supervision by an independent committee or supervisory board can strengthen internal control and reduce the potential for fraud caused by high pressure. In Islamic banking, the role of the Islamic supervisory board is very important because they function to ensure that all bank activities are in accordance with Islamic principles, create a more stable environment and reduce pressure on management to act manipulatively. Research from Sevyiolanita et al. (2022) also supports these results, indicating that the sharia supervisory board can strengthen ethical governance, so that financial pressure does not trigger fraud.

### Sharia Supervisory Board's Moderation of Opportunities

Hypothesis H8, which states that the sharia supervisory board can moderate in strengthening or weakening the influence of opportunity on financial statement fraud, is also proven in this study. Opportunity arises when there is a weakness in internal control, which can be exploited to commit fraud. In agency theory, the sharia supervisory board plays a role in ensuring that the control structure in Islamic banks remains strong, thereby reducing the opportunity for fraud. This study supports the findingsThe Greatest Showman (2022), which found that supervision from the supervisory board is able to narrow the room for manipulation in the organization by strengthening internal control. In the context of the fraud hexagon, opportunity is a key factor that allows fraud to occur, but the role of the sharia supervisory board in Islamic banking functions as a supervisor that ensures that transactions and financial reporting are in line with sharia values. Research byThe Last Supper (2021)also stated that opportunities can be minimized through strict internal controls, especially in organizations that implement high compliance standards such as Islamic banking.

#### Sharia Supervisory Board's Moderation of Rationalization

Hypothesis H9, which states that the sharia supervisory board can moderate the effect of rationalization on financial reporting fraud, is not proven in this study. Rationalization often occurs when management seeks justification for the manipulative actions they take, even considering it as "for the good of the company". Although agency theory suggests that the sharia supervisory board can build a strong ethical culture to prevent justification of manipulative actions(Hildayani & Serly, 2021), the results of the study indicate that the role of the sharia supervisory board in moderating rationalization is not yet significant. In the fraud hexagon, rationalization is a factor that makes individuals feel comfortable with the fraudulent actions they commit. (Uwah et al., 2023), but this study shows that the sharia supervisory board is not effective enough in preventing this rationalization in Islamic banking. This may be due to obstacles in the internalization of ethical values that should be the basis for every activity of Islamic banks.

#### Sharia Supervisory Board Moderation on Capability

Hypothesis H10, which states that the sharia supervisory board can moderate in strengthening or weakening the influence of capability on financial statement fraud, is not proven in this study. Capability in the Fraud Hexagon refers to the technical skills and expertise of individuals that allow them to exploit system weaknesses to commit fraud. According to research by John Smith (2021), technical ability is often only a supporting factor in fraudulent acts, not the main driver. In the context of Islamic banking, the Islamic supervisory board focuses more on

supervising compliance with Islamic principles and ethical standards, which makes the technical aspect of individual ability more difficult to control through regular supervision. Research byIzzati & Syofyan (2023)also supports this view, suggesting that the technical aspects of manipulative actions are often beyond the reach of formal supervision, especially when supervision is focused on sharia compliance.

### Sharia Supervisory Board's Moderation Against Arrogance

Hypothesis H11, which states that the sharia supervisory board can moderate in strengthening or weakening the influence of arrogance on financial reporting fraud, is also not proven. Individuals with high levels of arrogance may feel immune to rules and supervision, which risks increasing fraudulent acts. According to Lastanti et al. (2022), arrogance is an intrinsic trait that is difficult to influence by external supervision, including supervision by the sharia supervisory board. Although Islamic banking emphasizes a strong ethical culture, arrogance as a personal character is difficult to moderate effectively, because its nature is more related to the individual's personality and is not easily influenced by formal control mechanisms.

### Sharia Supervisory Board Moderation Against Collusion

Hypothesis H12, which states that the sharia supervisory board can moderate in strengthening or weakening the influence of collusion on financial statement fraud, is also not proven. In this context, collusion is measured through the audit fees incurred to audit the annual report or financial statements of Islamic banking. High audit fees may reflect the potential for improper cooperation between the auditor and the auditee, which allows manipulation in the financial statements. According to research by Maulina & Meini (2023), high audit fees are often associated with potential manipulation, as auditors may be more permissive of irregularities in financial reporting. In Islamic banking, although the Shariah Supervisory Board is tasked with monitoring compliance with Shariah principles, they may not be fully effective in detecting indications of collusion related to audit fees. The Last Airbender (2023) added that high audit fees are often difficult to effectively monitor by the sharia supervisory board, because these expenses are technical in nature and involve external parties (auditors) who have an independent role. This makes internal supervision less effective in reducing the risk of collusion that can trigger fraud by allowing deviations in financial reports.

# **CONCLUSION**

Based on the results of the research conducted, it can be concluded from the results of the hypothesis test, namely this study shows that pressure, opportunity, and rationalization have a significant influence on financial statement fraud. However, ability, arrogance, and collusion have no influence on financial statement fraud. Furthermore, the sharia supervisory board can moderate in strengthening or weakening the influence of pressure, opportunity, on financial statement fraud. This study also shows that the sharia supervisory board cannot moderate the influence of rationalization on financial statement fraud. Then, in this study which states that the moderation of the sharia supervisory board in strengthening or weakening the influence of ability, arrogance, and collusion does not have a significant influence on financial statement fraud.

This study shows that the role of the Sharia Supervisory Board is very important in improving good corporate governance in Islamic financial institutions. This study can encourage these institutions to pay more attention to the structure of supervision and good governance. This finding can be a basis for policy makers to formulate stricter regulations related to financial reporting supervision. The importance of education and training for members of the Sharia Supervisory Board and management of Islamic financial institutions is also emphasized. This study is expected to contribute to understanding and preventing financial reporting fraud in the Islamic banking sector. In addition, this study can also help increase public trust in the Islamic financial

system and encourage Islamic financial institutions to be more transparent and accountable. Thus, this study can be a reference for further research and practice in the field to improve the quality of supervision and governance in Islamic financial institutions. This study can also help identify factors that influence financial reporting fraud and develop strategies to prevent it. Therefore, this study can make a significant contribution to efforts to prevent fraud in the Islamic banking sector.

#### **REFERENCE**

- ACFE. (2024). Association of Certified Fraud Examiners The Nations Occupational Fraud 2024:A Report To The Nations. In *Association of Certified Fraud Examiners*. https://legacy.acfe.com/report-to-the-nations/2024/
- Achmad, T., Ghozali, I., Helmina, M. R. A., Hapsari, D. I., & Pamungkas, I. D. (2023). Detecting Fraudulent Financial Reporting Using the Fraud Hexagon Model: Evidence from the Banking Sector in Indonesia. *Economies*, 11(1). https://doi.org/10.3390/economies11010005
- Affes, W., & Jarboui, A. (2023). The impact of corporate governance on financial performance: a cross-sector study. *International Journal of Disclosure and Governance*, 20(4), 374–394. https://doi.org/10.1057/s41310-023-00182-8
- Afriani, R. I., Handayani, N., Apriani, T., & Husni, M. (2023). Model Triangulasi Dalam Mendeteksi Kecurangan Laporan Keuangan. *Jurnal Revenue*, *4*(1), 282–291. https://doi.org/10.46306/rev.v4i1.226
- Afzali, M. (2023). Corporate culture and financial statement comparability. *Advances in Accounting*, 60(December 2022), 100640. https://doi.org/10.1016/j.adiac.2022.100640
- Agustini, M., & Iskak, J. (2021). Faktor-Faktor Yang Mempengaruhi Fraudulent Financial Statement: Studi Pendekatan Fraud Pentagon Theory. *Jurnal Kontemporer Akuntansi*, 1(2), 105. https://doi.org/10.24912/jka.v1i2.15094
- Carla, C., & Pangestu, S. (2021). Deteksi Fraudulent Financial Reporting Menggunakan Fraud Pentagon. *Ultimaccounting: Jurnal Ilmu Akuntansi*, 13(1), 125–142. https://doi.org/10.31937/akuntansi.v13i1.1857
- Citterio, A., & King, T. (2023). The role of Environmental, Social, and Governance (ESG) in predicting bank financial distress. *Finance Research Letters*, *51*(July 2022), 103411. https://doi.org/10.1016/j.frl.2022.103411
- Dambra, M., Even-Tov, O., & Naughton, J. P. (2023). The economic consequences of GASB financial statement disclosure. *Journal of Accounting and Economics*, 75(2–3), 101555. https://doi.org/10.1016/j.jacceco.2022.101555
- Dimas Bagus Prakoso, W. S. (2022). Pengaruh Fraud Diamond terhadap Indikasi Kecurangan Laporan Keuangan (Studi pada Perusahaan Perkebunan yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2019). *JURNAL AKUNTANSI, EKONOMI Dan MANAJEMEN BISNIS, 10*(2), 100–110. https://doi.org/10.30871/jaemb.v10i2.4641
- Djamil, N., & Anggraini, M. (2023). Suppressing the Level of Corruption in Kampar District: A Study of The Impact of Accountability, Audit Opinions, Publication of Financial Statements, Audit Results And Follow-Up Of Audit Results Nasrullah Djamil Maiza Anggraini. *International Journal of Business and Accounting*, *1*(1), 11–25. https://doi.org/10.5281/zenodo.10538909
- Đukić, T., Pavlović, M., & Grdinić, V. (2023). Uncovering Financial Fraud: The Vital Role of Forensic Accounting and Auditing in Modern Business Practice. *Economic Themes*, 61(3), 407–418. https://doi.org/10.2478/ethemes-2023-0021
- Francis, J. R. (2023). Going big, going small: A perspective on strategies for researching audit quality. *British Accounting Review*, 55(2), 101167. https://doi.org/10.1016/j.bar.2022.101167
- Ghaisani, H. M., Triyono, & Bawono, A. D. B. (2022). Analysis of Financial Statement Fraud: The Vousinas Fraud Hexagon Model Approach and the Audit Committe as Moderating

- Variable. The International Journal of Business Management and Technology, 6(6), 2581–3889. www.theijbmt.com
- Hildayani, R., & Serly, V. (2021). Pengaruh Tekanan, Peluang, Rasionalisasi dan Nilai Etika terhadap Intensi Kecurangan Karyawan: Studi Kasus pada Perusahaan BUMN. *Jurnal Eksplorasi Akuntansi*, *3*(4), 734–748. https://doi.org/10.24036/jea.v3i4.422
- Humphrey, E. A., Isenmilia, P. A., & Omoye, A. S. (2023). Fraud Pentagon: Detection of Financial Statement Fraud in a Firm. *Mediterranean Journal of Social Sciences*, *14*(6), 102. https://doi.org/10.36941/mjss-2023-0040
- Izzati, A. N., & Syofyan, E. (2023). Pengaruh Tekanan, Kesempatan, Rasionalisasi, dan Kemampuan terhadap Kecurangan Laporan Keuangan: Studi Empiris BUMN yang Terdaftar di BEI Tahun 2018-2020. *Jurnal Nuansa Karya Akuntansi*, *1*(2), 186–202. https://doi.org/10.24036/jnka.v1i2.15
- Johan Setiawan. (2021). Analisis Metode Pendeteksian Fraud Financial Statement: Literatur Review. *Jurnal Wahana Akuntansi*, *16*(2), 153–174. https://doi.org/10.21009/wahana.16.022
- Katsirin, K. (2024). Analysis of Fraud Patterns in Islamic Banking Transactions: Strategies and Implementation of Prevention. *Asia Pacific Fraud Journal*, 9(1). https://doi.org/10.21532/apfjournal.v9i1.321
- Khamainy, A. H., Ali, M., & Setiawan, M. A. (2022). Detecting financial statement fraud through new fraud diamond model: the case of Indonesia. *Journal of Financial Crime*, 29(3), 925–941. https://doi.org/10.1108/JFC-06-2021-0118
- Kukreja, G., Gupta, S. M., Sarea, A. M., & Kumaraswamy, S. (2020). Beneish M-score and Altman Z-score as a catalyst for corporate fraud detection. *Journal of Investment Compliance*, 21(4), 231–241. https://doi.org/10.1108/joic-09-2020-0022
- Lastanti, H. S., Murwaningsari, E., & Umar, H. (2022). the Effect of Hexagon Fraud on Fraud Financial Statements With Governance and Culture As Moderating Variables. *Media Riset Akuntansi*, *Auditing & Informasi*, 22(1), 143–156. https://doi.org/10.25105/mraai.v22i1.13533
- Liu, C., Ryan, D., Lin, G., & Xu, C. (2023). No rose without a thorn: Corporate teamwork culture and financial statement misconduct. *Journal of Behavioral and Experimental Finance*, *37*, 100786. https://doi.org/10.1016/j.jbef.2022.100786
- Maharanti, P., Yudi, Y., & Friyani, R. (2024). Determination of the Fraud Hexagon on the Tendency of Fraudulent Financial Reporting in the Provinces of Indonesia. *International Journal of Multidisciplinary Approach Research and Science*, 2(03), 1206–1221. https://doi.org/10.59653/ijmars.v2i03.946
- Maulina, N. S., & Meini, Z. (2023). Pengaruh Fraud Hexagon Terhadap Fraudulent Financial Statement. *Jurnal Akuntansi Universitas Jember*, 21(2), 97. https://doi.org/10.19184/jauj.v21i2.38169
- Miftahul Jannah, V., Andreas, A., & Rasuli, M. (2021). Pendekatan Vousinas Fraud Hexagon Model dalam Mendeteksi Kecurangan Pelaporan Keuangan. *Studi Akuntansi Dan Keuangan Indonesia*, 4(1), 1–16. https://doi.org/10.21632/saki.4.1.1-16
- Navila Rahma, N., & Permata Sari, S. (2023). Detection of Fraud Financial Statements through the Hexagon Model Vousinas Fraud Dimensions: Review on Jakarta Islamic Index 70. *International Journal of Latest Research in Humanities and Social Science*, 06(01), 152–159. www.ijlrhss.com
- Rachmi, F. A., Supatmoko, D., & Maharani, B. (2020). Analisis Financial Statement Fraud Menggunakan Beneish M-Score Model Pada Perusahaan Pertambangan Yang Terdaftar Di Bursa Efek Indonesia (Analysis of Financial Statement Fraud Using Beneish M-Score Model for Mining Companies Listed in Indonesian Stock Exc. *E-Journal Ekonomi Bisnis Dan Akuntansi*, 7(1), 7–12. https://doi.org/10.19184/ejeba.v7i1.16091

- Sawarni, K. S., Narayanasamy, S., & Padhan, P. C. (2023). Impact of earnings management on working capital management efficiency. *Finance Research Letters*, *54*(January). https://doi.org/10.1016/j.frl.2023.103778
- Sevyiolanita, N. L. D., Suryandari, N. N. A., & Putra, G. B. B. (2022). Pengaruh Fraud Triangle, Kesesuaian Kompensasi, Dan Kepuasan Kerja Terhadap Tindakan Kecurangan (Studi Pada LPD Di Kecamatan Tejakula). *JURNAL KARMA (Karya Riset Mahasiswa Akuntansi)*, 2(1), 2382–2388.
- Sidauruk, T. D., & Abimanyu, F. Z. (2022). Faktor-Faktor yang Mempengaruhi Kecurangan Laporan Keuangan dalam Perspektif Fraud Triangle. *Jurnal Akuntansi, Keuangan, Dan Manajemen*, 4(1), 29–42. https://doi.org/10.35912/jakman.v4i1.1677
- Soltani, M., Kythreotis, A., & Roshanpoor, A. (2023). Two decades of financial statement fraud detection literature review; combination of bibliometric analysis and topic modeling approach. *Journal of Financial Crime*, *30*(5), 1367–1388. https://doi.org/10.1108/JFC-09-2022-0227
- Suarni, A., & Amelia, R. (2022). Analysis of Mosque Financial Management in Ujung Bulu District, Bulukumba Regency, South Sulawesi, Indonesia ARTICLE INFO ABSTRACT. *Public Sector Management and Accounting Research*, 2(2), 10–22. https://doi.org/10.55980/psmar.v2i2.12
- Suh, J. B., & Shim, H. S. (2020). The effect of ethical corporate culture on anti-fraud strategies in South Korean financial companies: Mediation of whistleblowing and a sectoral comparison approach in depository institutions. *International Journal of Law, Crime and Justice*, 60(January), 100361. https://doi.org/10.1016/j.ijlcj.2019.100361
- Suwena, K. R. (2021). Tekanan, Kesempatan, dan Rasionalisasi Pemicu Tindakan Kecurangan (Fraud) pada Perusahaan. *Jurnal Ilmiah Akuntansi*, 6(1), 102. https://doi.org/10.23887/jia.v6i1.31540
- Uwah, U., Aji, I., & Iniabasi, E. (2023). Accounting Ratios and False Financial Statements Detection: Evidence From Nigerian Quoted Companies. *AKSU Journal of Administration and Corporate Governance*, *3*(1), 61–74. https://doi.org/10.61090/aksujacog.2023.105
- van Driel, H. (2019). Financial fraud, scandals, and regulation: A conceptual framework and literature review. *Business History*, 61(8), 1259–1299. https://doi.org/10.1080/00076791.2018.1519026
- Vousinas, G. L. (2019a). Advancing theory of fraud: the S.C.O.R.E. model. *Journal of Financial Crime*, 26(1), 372–381. https://doi.org/10.1108/JFC-12-2017-0128
- Vousinas, G. L. (2019b). Supply chain finance: definition, modern aspects and research challenges ahead. Supply Chain Finance: Risk Management, Resilience and Supplier Management, December, 63–95.
- Wang, Y., Yu, M., & Gao, S. (2022). Gender diversity and financial statement fraud. *Journal of Accounting and Public Policy*, 41(2). https://doi.org/10.1016/j.jaccpubpol.2021.106903