Journal of Economics and Business UBS
e-ISSN: 2774-7042 p-ISSN: 2302-8025
Vol. 15 No. 4 July 2026

The Effect of Fraud Hexagon on the Potential of Fraudulent Financial Statements with Islamic Corporate Governance as a Moderation: A Study on Indonesian and Malaysian Sharia Banking

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Keywords:
Fraud Hexagon; Fraudulent Financial Statements; Islamic Corporate Governance; Islamic Banking; Indonesia; Malaysia.

Abstract

This research analyzes the influence of the Fraud Hexagon on fraudulent financial statements with Islamic Corporate Governance (ICG) as a moderator in Islamic banking in Indonesia and Malaysia, motivated by the potential for financial statement fraud in the industry despite Sharia principles emphasizing honesty and accountability. Performance pressure, weak oversight, and transaction complexity necessitate empirical testing using the Fraud Hexagon Theory approach. This research used a quantitative approach with explanatory research. The sample includes Islamic commercial banks in Indonesia and Malaysia, selected using purposive sampling based on the availability of financial and annual reports for the 2015-2024 period, yielding 140 observations for Indonesia and 150 for Malaysia. The data is secondary data organized in a panel structure and analyzed using moderated regression analysis with EViews 12. Model estimation used the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM), selected based on the Chow, Hausman, and Lagrange Multiplier tests. The results show that the factors influencing fraudulent financial statements differ between the two countries, and Islamic Corporate Governance is proven to moderate part of that influence, particularly the financial stability dimension. This study is expected to contribute theoretically to the development of the Fraud Hexagon and Islamic Corporate Governance literature, as well as practically for management, regulators, and stakeholders in improving governance quality and minimizing fraudulent financial statement risk in Indonesia and Malaysia.

INTRODUCTION

According to data from the Ministry of Home Affairs of the Republic of Indonesia in the first semester of 2025, around 87.14% of Indonesia's population or around 249.82 million people are Muslim, making it the country with the largest Muslim population in the region (Ministry of Home Affairs of the Republic of Indonesia, 2025). In addition to Indonesia, Malaysia is also a predominantly Muslim country, with 63.5% of the total population being Muslim by 2025 (Worldometer, 2025). This condition makes the need for banking with sharia principles even higher, along with public awareness to carry out economic activities that are in line with religious values, so that both countries have great market potential for strengthening and expanding Islamic banking (Addawiyah et al., 2025; Mutmainah & Mahmudah, 2024; Novarina & Triyanto, 2022).

During the period 2014-2024, Islamic banking in Indonesia and Malaysia continues to grow, with Malaysia experiencing more rapid growth while Indonesia shows a steady increase. On the other hand, asset growth in both countries tends to slow down, namely in Indonesia from 12.41% in 2014 to 9.88% in 2024, and in Malaysia from 11.49% in 2014 to 8.2% in 2024 (Sharia Banking Statistics OJK & Bank Negara Malaysia, processed 2025). Although asset growth has decreased, the increase in market share reflects increasing public trust in Islamic banking, so maintaining reputation and service quality is the key to the sustainability of the positive development of Islamic banking in the future.

One of the risks that must be anticipated in this development is fraud committed by management, especially fraudulent financial statements, which can harm customers and shareholders while lowering public trust. The practice ranges from presenting incorrect information to hiding data so that financial statements are inaccurate and not in accordance with applicable accounting standards (Aulia Nur et al., 2023). The Association of Certified Fraud Examiners (ACFE) survey in Asia for the period 2014-2024 shows that losses due to fraudulent financial statements fluctuate but remain high, falling from USD 1,000,000 in 2014 to USD 800,000 in 2018, increasing to USD 954,000 in 2020, briefly falling to USD 593,000 in 2022, then rising again to USD 766,000 in 2024 (Association of Certified Fraud Examiners, 2024). The ACFE survey in Indonesia also shows the banking and financial services sector as one of the five most affected industries by occupational fraud, with the government sector ranking 15%, construction 14%, banking and financial services 12%, health 12%, and insurance 10%, confirming that fraud remains a serious threat despite prevention efforts being made.

The phenomenon of fraudulent financial statements was also found in Islamic banking, such as alleged embezzlement that was not recorded in the system at Bank Victoria Syariah (Aprilia, 2024), alleged fictitious loans worth IDR 548 billion at BJB Syariah, as well as falsification of recording and manipulation of recurring transaction documents by BSI Banda Aceh Branch employees in 2022-2023 (Kontras Aceh, 2024). These cases show that fraud in Islamic banking is not just an incidental event, but a systemic risk inherent in the organization, and in the perspective of sharia it is contrary to the principles of trust and adl (justice), so a more comprehensive detection and prevention system is needed.

Various previous studies have shown that the existence of sharia principles and a formal compliance system has not fully guaranteed that Islamic banking financial statements are free from fraudulent financial statement practices (Kharisma & Chairina, 2023). Ali et al. (2023) found that Islamic financial institutions continue to face the risk of fraudulent financial statements triggered by performance achievement pressures and weak effectiveness of internal controls, while Swandaru & Muneeza (2022) emphasize that the operational complexity of Islamic banks -- including the use of diverse contracts and high managerial discretion in financial reporting -- increases the potential for material misrepresentations if not balanced by strong governance. However, most previous research still focused on one country separately and has not placed Islamic Corporate Governance as a moderation variable in the relationship between Fraud Hexagon factors and fraudulent financial statements, so there is a research gap that needs to be filled through a cross-country comparative approach as conducted in this study.

This study uses Fraud Hexagon Theory as a basis to analyze the factors that affect fraudulent financial statements in Islamic banking in Indonesia and Malaysia. This theory is a development of the fraud triangle which includes pressure, opportunity, and rationalization, then refined into a fraud diamond with the addition of the element of capability, fraud pentagon with the element of arrogance, and fraud hexagon which adds an element of collusion. In this study, fraudulent financial statements were measured using the accrual quality-based F-score model, which is considered more suitable for the Islamic banking industry than the Beneish M-Score model. The variables analyzed included financial stability, financial target, ineffective monitoring, total accrual to total assets, change of directors, frequent number of CEO's picture, and related party transactions, while Islamic Corporate Governance (ICG) was positioned as a moderation variable that was expected to be able to weaken the influence of Fraud Hexagon factors on the potential for fraudulent financial statements. This research model is designed to examine the differences in the influence of each factor on Islamic banking in Indonesia and Malaysia as well as evaluate the effectiveness of the implementation of Islamic governance in mitigating the risk of financial statement fraud.

The novelty of this research lies in the use of Islamic Corporate Governance as a moderation variable in the relationship between Fraud Hexagon and fraudulent financial statements, which is realized through the supervisory functions of the Sharia Supervisory Board, Board of Directors, Board of Commissioners, and Audit Committee. Another novelty lies in the comparative approach between Indonesia and Malaysia, considering that the two countries have different levels of maturity in sharia governance regulations: Malaysia through the Islamic Financial Services Act (IFSA) 2013 and the Shariah Governance Policy Document 2019 issued by Bank Negara Malaysia, while Indonesia through the Financial Services Authority Regulation Number 67/POJK.03/2016 concerning the Implementation of Governance for Sharia Commercial Banks and Sharia Business Units. The difference in maturity level provides an opportunity to test the effectiveness of Islamic Corporate Governance in moderating the relationship between Fraud Hexagon and fraudulent financial statement factors, so this study is titled "The Influence of Fraud Hexagon on Fraudulent Financial Statements with Islamic Corporate Governance as Moderation: A Study on Islamic Banking in Indonesia and Malaysia".

In addition to the regulatory aspect, the urgency of this comparative study is also driven by the differences in the structure of the Islamic banking market between the two countries. Malaysia implements a more integrated dual banking system model, where Islamic and conventional banks operate within a complementary supervisory framework under Bank Negara Malaysia, while Indonesia implements a model that separates Islamic Commercial Banks as separate legal entities from their conventional parents. These structural differences have the potential to produce different patterns of fraudulent financial statement risk and the effectiveness of different Islamic Corporate Governance mechanisms, so the comparative findings of this study are expected to provide a more complete picture of how the institutional context affects the success of sharia governance in preventing financial reporting fraud.

This research aims to analyze the influence of the Fraud Hexagon on fraudulent financial statements with Islamic Corporate Governance as a moderating variable in Islamic banking in Indonesia and Malaysia, specifically to examine the influence of Fraud Hexagon factors on fraudulent financial statements in each country, test the moderating role of Islamic Corporate Governance, and compare the patterns of influence between the two countries. Theoretically, this research contributes to the development of Fraud Hexagon and Islamic Corporate Governance literature by providing empirical evidence from the Islamic banking sector in two major Muslim-majority countries, extending the application of Agency Theory and Fraud Hexagon Theory to Islamic financial institutions, and enriching the understanding of how regulatory and institutional contexts affect fraud risk. Practically, this research offers valuable insights for Islamic bank management in designing effective internal control systems, provides empirical evidence for regulators (OJK in Indonesia and Bank Negara Malaysia) in formulating policies to strengthen Islamic corporate governance, and serves as a reference for stakeholders in assessing and mitigating fraudulent financial statement risk.

METHOD

Research Design

This research used a quantitative approach with the explanatory research method, which is research that aims to explain the causal relationship between variables through statistical analysis to measure, compare, and test existing theories (Sugiyono, 2017). This study examines the influence of variables representing the elements of Fraud Hexagon -- pressure (measured through financial stability and financial targets), opportunity (ineffective monitoring), rationalization (total accrual to total assets), capability (change of directors), arrogance (frequent number of CEO's picture), and collusion (related party transactions) -- on fraudulent financial statements, with Islamic Corporate Governance as a moderation variable in Islamic banking in Indonesia and Malaysia.

Populations, Samples, and Data Collection Techniques

The population of this study is all Sharia Commercial Banks (BUS) in Indonesia and Islamic banks in Malaysia. The sample was selected using purposive sampling techniques based on the availability of fully published annual reports and audited financial statements for the period 2015-2024, resulting in 14 Islamic banks in Indonesia (140 observations) and 15 Islamic banks in Malaysia (150 observations). The data is secondary data collected through documentary techniques from the official websites of each bank, the Financial Services Authority (OJK), and Bank Negara Malaysia (BNM) (Sugiyono, 2019). The data that has been obtained is classified and tabulated based on the panel data structure (entity dimension and time period) to ensure consistency of data between periods before being analyzed using the panel data regression method.

Data Analysis Models and Techniques

Data analysis was carried out through descriptive statistics, estimation model selection tests (Chow test, Hausman test, and Lagrange Multiplier test), classical assumption test, panel data regression analysis, and Moderated Regression Analysis (MRA), with the help of EViews 12 software. The panel data regression model used is as follows:

$$FFS_{it} = a + b1\ ACHANGE_{it} + b2\ ROA_{it} + b3\ BDOUT_{it} + b4\ TATA_{it} + b5\ DCHANGE_{it} + b6\ CEOPICT_{it} + b7\ RPTAL_{it} + e_{it}$$

The Moderated Regression Analysis (MRA) model used to test the role of Islamic Corporate Governance (ICG) moderation is as follows (Ghozali, 2018):

$$FFS_{it} = a + b1\ ACHANGE_{it} + b2\ ROA_{it} + b3\ BDOUT_{it} + b4\ TATA_{it} + b5\ DCHANGE_{it} + b6\ CEOPICT_{it} + b7\ RPTAL_{it} + b8\ ICG_{it} + b9\ (ACHANGE \times ICG)_{it} + b10\ (ROA \times ICG)_{it} + b11\ (BDOUT \times ICG)_{it} + b12\ (TATA \times ICG)_{it} + b13\ (DCHANGE \times ICG)_{it} + b14\ (CEOPICT \times ICG)_{it} + b15\ (RPTAL \times ICG)_{it} + e_{it}$$

Description: FFS = fraudulent financial statement (F-Score); ACHANGE = total change in assets; ROA = return on assets; BDOUT = proportion of independent board of commissioners; TATA = total accrual to total assets; DCHANGE = change of directors;

CEOPICT = CEO photo frequency; RPTAL = ratio of related party transactions to total assets; ICG = Islamic Corporate Governance; i = the ith entity; t = t-period; e = error term.

The selection of the best estimation model between Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) was carried out consecutively through the Chow test (CEM vs FEM), the Hausman test (FEM vs REM), and the Lagrange Multiplier test (CEM vs REM). Models using REM estimation are not required to meet the classical assumption test in full because they have accommodated heterogeneity between cross-section units through a random error component, while models that use CEM estimation must still be tested for normality, multicollinearity, heteroscedasticity, and autocorrelation because it is an OLS pooled approach. Hypothesis testing was carried out through a partial test (t-test) with a significance level of 5%, as well as a determination coefficient (Adjusted R-squared) to measure the model's ability to explain variations in fraudulent financial statements (Ghozali, 2018).

RESULTS AND DISCUSSION

Selection of Estimation Models and Classical Assumption Tests

The selection of the best estimation model was carried out through the Chow test, the Hausman test, and the Lagrange Multiplier (LM) test, with the results summarized in Table 4.

Table 1. Summary of Estimation Model Selection Test

Test	Objek	Test Statistics	Prob.	Verdict
Chow	Indonesia	F = 3.412161	0.0002	FEM
Chow	Malaysia	F = 1.205251	0.2793	CEM
Hausman	Indonesia	Chi-Sq = 4.605821	0.7079	REM
Hausman	Malaysia	Chi-Sq = 4.840862	0.6794	REM
Lagrange Multiplier	Indonesia	Breusch-Pagan = 15.335	0.0001	REM
Lagrange Multiplier	Malaysia	Breusch-Pagan = 0.065	0.7992	CEM

Source: EViews 12, data processed (2026).

Based on the series of tests, the selected model for Indonesian Islamic Banking is the Random Effect Model (REM), while for Malaysian Islamic Banking is the Common Effect Model (CEM). Since REM has accommodated heterogeneity between units through a random error component , classical assumption tests are not fully required for the Indonesian model. In contrast, the Malaysian model using CEM was tested on its classical assumptions: the normality test showed a Jarque-Bera probability value of 0.3746 (> 0.05) so that the residual was normally distributed; the multicollinearity test showed that the entire correlation value between independent variables was well below 0.80 (the highest value of 0.1999 between BDOUT and CEOPICT) so that the model was free from the symptoms of multicollinearity; the heteroscedasticity test of the Glejser method showed three variables (ACHANGE, CEOPICT, RPTAL) has a probability below 0.05, so the model experiences symptoms of heteroscedasticity and corrected using the EGLS Cross-section Weights Panel estimation with the Covariance Covariance Cross-section SUR (PCSE) (Apik Ibrahim et al., 2022), which managed to eliminate these symptoms in the final estimate; while the autocorrelation test with Durbin-Watson yielded a value of 2.247, which is in the inconclusive zone So it is not possible to conclude with certainty about the existence or absence of autocorrelation.

Panel Data Regression Results and Hypothesis Test

The results of the panel data regression estimation and Moderated Regression Analysis (MRA) for the two countries are summarized in Table 5, which presents the coefficients, probability values, and conclusions of partial hypothesis testing (t-test) at a significance level of 5%.

Table 2. Summary of Hypothesis Testing Results (MRA)

Hipotesis	Variabel	Koef. Indonesia	Prob.	Indonesia Conclusion	Koef. Malaysia	Prob.	Malaysia Conclusion
H1	ACHANGE -> FFS	-0.3706	0.0000	H1a accepted	-0.5835	0.1589	H1b rejected
H2	ROA -> FFS	-0.0203	0.4955	H2a rejected	2.9384	0.0070	H2b accepted
H3	BDOUT -> FFS	1.2204	0.0330	H3a accepted	0.1955	0.6633	H3b rejected
H4	TATA -> FFS	0.4787	0.3514	H4a rejected	-1.5384	0.0272	H4b rejected*
H5	DCHANGE -> FFS	-0.2318	0.1714	H5a rejected	0.1709	0.1558	H5b rejected
H6	CEOPICT -> FFS	0.0321	0.0542	H6a rejected	-0.0158	0.7205	H6b rejected
H7	RPTAL -> FFS	0.0701	0.0016	H7a accepted	0.1523	0.0612	H7b rejected
H8	ACHANGE x ICG	-3.0744	0.0000	H8a accepted	-7.5416	0.0185	H8b accepted
H9	ROA x ICG	0.0176	0.8957	H9a rejected	7.8525	0.4887	H9b rejected
H10	BDOUT x ICG	2.4601	0.5133	H10a rejected	-0.3812	0.8584	H10b rejected
H11	TATA x ICG	8.5863	0.1501	H11a rejected	-1.4545	0.8192	H11b rejected
H12	DCHANGE x ICG	-1.8885	0.1080	H12a rejected	-1.8428	0.0470	H12b accepted
H13	CEOPICT x ICG	-0.1726	0.3712	H13a rejected	-0.1880	0.5105	H13b rejected
H14	RPTAL x ICG	0.3981	0.0391	H14a accepted	-13.8189	0.3774	H14b rejected

Source: EViews 12, data processed (2026).

*The TATA coefficient in Malaysia is significant but in a negative direction, contrary to the hypothetical direction, so H4b is still rejected.

Based on the results of the MRA estimate, the final regression equation can be formulated as follows. For Indonesian Islamic Banking:

$$FFS\_IND = 0.746 - 0.371\ ACHANGE + 1.220\ BDOUT + 0.071\ RPTAL - 3.074\ (ACHANGE \times ICG) + 0.398\ (RPTAL \times ICG) + e$$

For Shariah Banking Malaysia:

$$FFS\_MLY = -0.014 + 2.938\ ROA - 1.538\ TATA - 7.542\ (ACHANGE \times ICG) - 1.843\ (DCHANGE \times ICG) + e$$

The two equations above only display variables that have been proven to have a significant effect on each country. In the Indonesian model, an increase of one unit of ACHANGE lowered the F-Score by 0.371 units, while an increase of one unit of BDOUT and RPTAL increased the F-Score by 1.220 and 0.071 units, respectively. The interaction of ACHANGE x ICG and RPTAL x ICG showed that the presence of ICG changed the strength of influence of these two variables on the F-Score. In the Malaysian model, an increase of one unit of ROA increased the F-Score by 2,938 units while an increase of one unit of TATA decreased the F-Score by 1,538 units, and the interaction of ACHANGE x ICG and DCHANGE x ICG showed the role of ICG in weakening the influence of these two variables.

The determination coefficient (Adjusted R-squared) of the Indonesian model of 0.4363 (43.63%) is in the "medium" category, indicating that the independent and moderation variables in the model are able to explain the variation in fraudulent financial statements of 43.63%, while the rest are explained by other factors outside the model. Meanwhile, the Adjusted R-squared Malaysian model of 0.1654 (16.54%) is in the "very low" category (Sugiyono, 2017). This comparison shows that the model's ability to explain the variation in fraudulent financial statements in Indonesian Sharia Banking is better than that of Malaysia, so that in Malaysian Sharia Banking it is indicated that there are more other factors outside the model that also affect the risk of fraudulent financial statements.

The following discussion is prepared based on the six dimensions of Fraud Hexagon tested in this study, namely pressure (financial stability and financial target), opportunity (ineffective monitoring), rationalization (total accrual to total assets), capability (change of directors), arrogance (frequent number of CEO's picture), and collusion (related party transaction), followed by a discussion of the role of Islamic Corporate Governance moderation in the seven relationships. This arrangement was chosen so that the discussion can systematically trace the consistency and differences in influence patterns between Indonesian and Malaysian Islamic Banking in each dimension, as well as relate it back to the theoretical propositions that have been built in the literature review section. With this approach, the discussion not only explains the statistical significance alone, but also seeks to provide a contextual interpretation of why a risk dimension is relevant in one country but not in another, taking into account the regulatory characteristics, market structure, and level of maturity of each country's sharia governance as outlined in the introduction.

Dimensi Pressure: Financial Stability dan Financial Target

Financial stability (ACHANGE) has a negative and significant effect on fraudulent financial statements in Indonesian Islamic Banking (coefficient -0.3706; prob. 0.0000), so that H1a is accepted, but not significant in Malaysian Islamic Banking so H1b is rejected. These findings show that in the Indonesian context, the lower the asset growth or the weaker the bank's financial stability, the greater the pressure faced by management to maintain the performance image, in line with Agency Theory (Jensen & Meckling, 1976) and consistent with the findings of Faradiza (2020) and Sihombing & Rahardjo (2014). In the context of Islamic banking, the pressure is also related to the risk of transferring funds of customers who own profit-sharing-based investments (displaced commercial risk). In contrast, the financial target (ROA) had no significant effect on fraudulent financial statements in Indonesia (H2a was rejected), but it had a positive and significant effect in Malaysia (coefficient of 2.9384; prob. 0.0070; H2b accepted), which indicates that the pressure to achieve profitability is actually the main driver of the risk of fraudulent financial statements in Malaysian Islamic banks.

The difference in the pattern of pressure influence on the two countries can be explained through the difference in market structure and the level of competition in the Islamic banking industry. In Indonesia, with a relatively larger number of Islamic banks and a growing market share, the most pressing pressure for management is to maintain asset growth to remain competitive with conventional banks and fellow Islamic banks. In contrast, in Malaysia where the Islamic banking market is relatively more mature, the pressure shifts to achieving profitability targets to meet institutional shareholder expectations. Implicitly, pressure-based fraud prevention policies need to be adjusted: in Indonesia it focuses on monitoring asset stability, while in Malaysia it focuses on monitoring the reasonableness of achieving profit targets.

Dimensi Opportunity: Ineffective Monitoring

Ineffective monitoring proxied through the proportion of independent commissioners (BDOUT) has a positive and significant effect on fraudulent financial statements in Indonesian Islamic Banking (coefficient of 1.2204; prob. 0.0330; H3a is accepted), but it is not significant in Malaysia (H3b is rejected). This positive influence direction indicates that the formal existence of independent commissioners is not necessarily followed by the effectiveness of substantive supervision, so a high proportion does not necessarily reduce the risk of fraud phenomenon that has also been found in various corporate governance studies in emerging markets. These findings confirm the importance of the quality and independence of the supervisory function, not just the fulfillment of formal structures (Damayanti & Suryani, 2019).

This condition can also be explained through the phenomenon of board busyness, namely independent commissioners who serve in many institutions at once so that the time and attention devoted to supervision is limited. In addition, the high proportion of independent commissioners in banks with diverse complexity of sharia financing products has the potential to be not balanced with adequate technical competence to detect misrepresentations, resulting in the supervisory function becoming less effective substantively even though it is structurally fulfilled. Therefore, strengthening the competence and real independence of commissioners is more important than simply fulfilling the minimum proportions required by regulations.

Dimensi Rationalization: Total Accrual to Total Assets

Total accrual to total assets (TATA) did not have a significant effect on fraudulent financial statements on Indonesian Islamic Banking (H4a rejected), but had a significant negative effect on Malaysia (coefficient -1.5384; prob. 0.0272). Because the direction of the influence is opposite to the direction of the hypothesis that expects a positive influence, H4b is still declared rejected. These results indicate that the increase in accruals in Malaysian Islamic banking does not necessarily reflect profit manipulation practices, but may reflect more conservative accounting policies as the quality of reporting improves.

The insignificance of TATA in Indonesia may be due to the characteristics of sharia financing contracts, such as murabahah, mudharabah, and musyarakah, which have different revenue and margin recognition patterns than conventional banking, so that conventional accrual ratios are less sensitive in detecting manipulations in the Islamic financial structure. This condition suggests the need to develop a rationalization proxy that is more specific to the characteristics of sharia contracts in subsequent research, instead of fully adopting accrual measures from the conventional accounting literature.

Dimensi Capability dan Arrogance: Change of Directors dan CEO Picture

Change of directors (DCHANGE) and frequent number of CEO's picture (CEOPICT) did not have a significant effect on fraudulent financial statements, both in Indonesian and Malaysian Sharia Banking (H5a, H5b, H6a, and H6b were all rejected). These findings show that factors related to individual management characteristics of leadership change and media exposure of leaders have not been proven to be the main determinants of fraudulent financial statements in Islamic banking in both countries, so organizational and governance factors appear to have a greater role than individual management factors.

The insignificance of these two proxies is in line with the characteristics of the banking industry which generally has a relatively structured and regulated leadership succession process, so the change of directors tends to be part of a normal governance mechanism, not an indication of an attempt to hide irregularities. Similarly, the frequency of CEO photos in annual reports reflects more of corporate communication strategies and the need to build public trust in Islamic financial institutions, rather than as a signal of individual leadership arrogance. These findings provide an important note that not all Fraud Hexagon proxies developed in the context of the manufacturing industry are automatically relevant to be applied in the context of the Islamic banking industry.

Dimensi Collusion: Related Party Transaction

Related party transaction (RPTAL) has a positive and significant effect on fraudulent financial statements in Indonesian Islamic Banking (coefficient 0.0701; prob. 0.0016; H7a is accepted), but is not significant in Malaysia (H7b is rejected). These results are consistent with the findings of Jaunanda et al. (2020) that transactions with related parties are vulnerable to being used for the personal interests of management due to weak supervision and potential conflicts of interest, so that it becomes an important indicator of the risk of fraudulent financial statements, especially in the context of Indonesian Islamic banking.

The high influence of related party transactions in Indonesia is suspected to be related to the ownership structure of some Islamic banks that are still closely affiliated with conventional parent companies and certain business groups, so that the intensity of transactions between related parties tends to be higher and more difficult to supervise independently. This is different from Malaysia, where the Shariah Governance Policy Document 2019 framework requires stricter disclosure and approval of related transactions, so the potential for abuse is relatively more controlled. These findings confirm that strengthening the approval mechanism and disclosure of related transactions is a top priority in preventing fraudulent financial statements in Indonesian Islamic banking.

The Role of Islamic Corporate Governance Moderation

Islamic Corporate Governance (ICG) has been proven to moderate the influence of financial stability on fraudulent financial statements in both countries with a negative direction (H8a and H8b are accepted), which means that ICG is able to weaken the pressures arising from weakening financial stability. In Indonesian Islamic Banking, ICG also moderates the influence of related party transactions in a positive direction (H14a is accepted), which actually strengthens the influence of related party transactions on fraudulent financial statements -- possibly because related transactions at banks with high ICG tend to be larger in volume but still risky if the substantive supervision is not optimal. In Malaysian Sharia Banking, ICG moderated the influence of change of directors in a negative direction (H12b accepted), indicating that more established Islamic governance in Malaysia is able to mitigate the risk of fraud arising from the change of directors. Most of the other interactions (ROA×ICG, BDOUT×ICG, TATA×ICG, CEOPICT×ICG, and DCHANGE×ICG in Indonesia and RPTAL×ICG in Malaysia) did not show a significant moderation effect, indicating that the effectiveness of ICG in moderating fraud risk is still partial and depends on the risk dimensions faced by each country (Swandaru & Muneeza, 2022).

The consistency of ICG's moderation role in financial stability in both countries provides a strong indication that the Sharia supervisory function -- especially the Sharia Supervisory Board -- is most effective in working on systemic and long-term risk dimensions, such as financial stability, rather than on technical-operational risk dimensions such as accrual management or leadership media exposure. This is in line with the main mandate of the Sharia Supervisory Board which is more oriented towards compliance with sharia principles and overall business sustainability, rather than on detailed supervision of daily transactions. These findings suggest that the strengthening of ICG in the future should also be directed at increasing the capacity to monitor operational risks more technically, so that the scope of its moderation effectiveness can be more comprehensive.

Comparison of Results between Indonesian and Malaysian Sharia Banking

Table 3. Comparison of Test Results between Indonesia and Malaysia

Aspects	Indonesia	Malaysia	Interpretasi
Adjusted R2	43,63%	16,54%	The Indonesian model has a clearly better power over FFS variations.
Dominant factors	ACHANGE (-), BDOUT (+), RPTAL (+)	LONG (+), NEAR (-)	FFS Indonesia is more influenced by governance and related transactions; Malaysia by performance & accrual pressures.
Dominant dimension	Pressure, Opportunity, Collusion	Pressure, Rationalization	The source of risk in Indonesia is more structural-relational; In Malaysia, it is more financially stable.
ICG moderation is significant	ACHANGE x ICG (-), RPTAL x ICG (+)	ACHANGE x ICG (-), DCHANGE x ICG (-)	The ICG effectively moderates financial stability pressures in both countries, with other variables being different.
Maturity of ICG	Still developing (POJK 67/2016)	More sustainable (IFSA 2013 & SGPD 2019)	The implementation of ICG Malaysia is supported by more mature regulations.

Source: Processed by researcher based on EViews 12 output from panel data regression and Moderated Regression Analysis (MRA) (2026)

In general, the factors that affect fraudulent financial statements in Indonesian Islamic banking are financial stability, board independence, and related party transactions, while in Malaysia it is return on assets and total accrual to total assets. These differences reflect the different characteristics of governance, business environment, and institutional conditions in the two countries. Judging from the Fraud Hexagon Theory, the pressure dimension is the most consistent dimension in explaining fraudulent financial statements in both countries, while the capability and arrogance dimensions are not proven to be significant in both countries, showing that organizational and corporate governance factors play a bigger role than individual management characteristics. In terms of moderation, ICG consistently moderates the influence of financial stability in both countries, while other variables that are moderated differ according to the dominant risk characteristics of each country, so that the strategy to prevent fraudulent financial statements needs to be adjusted to the risk characteristics of each country, with strengthening the implementation of ICG remaining an important factor for the integrity of Islamic banking financial reporting.

The difference in the Adjusted R-squared level between the two models (43.63% for Indonesia compared to 16.54% for Malaysia) also indicates that the determinants of fraudulent financial statements in Malaysian Islamic banking are more complex and influenced by factors outside the framework of the Fraud Hexagon framework and the ICGs tested in this study, such as the quality of external audits, the level of market competition, or more specific macroprudential regulatory characteristics. Conversely, the higher capabilities of the model in the Indonesian context suggest that the Fraud Hexagon framework combined with the ICG is relatively more representative in explaining the risk of fraudulent financial statements at the current stage of development of Indonesia's Islamic banking industry, although room for model refinement remains open in future research.

CONCLUSION

Based on the results of the analysis, this study shows that the influence of Fraud Hexagon Theory factors on fraudulent financial statements is different between Islamic banking in Indonesia and Malaysia. In Indonesian Islamic banking, financial stability has a significant negative effect, ineffective monitoring and related party transactions have a significant positive effect, while financial targets, total accrual to total assets, change of directors, and frequent number of CEO's picture have no significant effect. On the other hand, in Malaysian Islamic banking, the financial target has a significant positive effect, the total accrual to total assets has a significant negative effect, while other variables do not show a significant influence. The results of the study also show that Islamic Corporate Governance (ICG) plays a role as a partial moderation variable. ICG has been proven to weaken the influence of financial stability on fraudulent financial statements in both countries, strengthen the influence of related party transactions in Indonesia, and weaken the influence of change of directors in Malaysia. However, ICG has not been able to moderate the influence of financial targets, ineffective monitoring, total accrual to total assets, and frequent number of CEO's picture on fraudulent financial statements. These findings indicate that the effectiveness of ICGs in mitigating the risk of financial statement fraud still depends on the dominant governance characteristics and risk factors in each country. Based on these findings, several recommendations are proposed. Islamic bank management in Indonesia should strengthen related party transaction oversight, enhance independent commissioner effectiveness, and improve Sharia Supervisory Board supervision of financial stability risks. In Malaysia, management should focus on monitoring profit targets and accrual quality, ensuring proper governance transition during director changes. Regulators should also take strategic steps: OJK is advised to accelerate ICG regulatory strengthening beyond POJK 67/2016, particularly in independent oversight and RPT disclosure, while Bank Negara Malaysia should maintain its established ICG framework and enhance technical guidance for Sharia Supervisory Boards on fraud detection. Future research should expand samples to include other Islamic financial institutions, incorporate additional variables such as audit quality and institutional ownership, employ qualitative approaches, and conduct longitudinal studies to capture evolving fraud risk patterns.

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