MOTEKAR: Jurnal Multidisiplin Teknologi dan Arsitektur
E-ISSN: 3025-227X P-ISSN: 3025-2288
Vol. 3 No. 1 Mei 2025

Early Fraud Detection Using the Fraud Triangle Model in Islamic Banking

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Abstract
This study aims to analyze the potential for fraud in Islamic banking through the application of the Fraud Triangle Model, which consists of three key elements: pressure, opportunity, and rationalization. Although Islamic banking is founded on Islamic principles such as justice, transparency, and moral responsibility, fraudulent practices may still occur due to human factors and weaknesses in internal control systems. This research employs a literature review method by examining academic sources and relevant regulations. The findings reveal that economic pressure, weak internal oversight, and justifications for unethical behavior are primary drivers of fraud in Islamic financial institutions. Therefore, effective fraud mitigation strategies are needed, including strengthened corporate governance, supervision based on Islamic values, and the development of a work culture grounded in integrity. The application of the Fraud Triangle Model in the Islamic banking context is expected to support early fraud detection and prevention in a more ethical and effective manner.
Keywords: Islamic Banking, Fraud Triangle, Early Detection, Internal Control, Sharia Governance

INTRODUCTION

Islamic banking in Indonesia is present as an alternative financial system based on Islamic sharia principles, such as justice, transparency, and trustworthiness. With these values, the public has high hopes that Islamic banking operations will be free from deviant practices, including fraud. However, reality shows that Islamic banking remains vulnerable to various forms of fraud. The fraud phenomenon does not only occur in conventional banks, but has also hit Islamic banks, even involving internal employees at the management and executive levels. Bank Indonesia Circular Letter No. 13/28/DPNP of 2011 explains that fraud is an act that deviates or is intentionally allowed, with the aim of deceiving or cheating so as to harm other parties. In the context of Islamic banking, fraud is not only financially detrimental, but can also tarnish the moral credibility of sharia-based institutions. Therefore, early detection of potential fraud is an urgency that cannot be ignored. One of the widely used theoretical approaches to understanding and detecting fraud is the Fraud Triangle Model developed by Donald Cressey. This model explains that fraud generally occurs due to three elements: pressure, opportunity, and rationalization. These three elements provide a logical and systematic framework in identifying potential fraud before it occurs.

A study by Sulistiyo et al. (2020) reinforces the importance of this approach. In their study entitled "Implementation of The New Fraud Triangle Model with a Sharia Perspective in Detecting Fraud Behavior", they found that fraudulent acts at a sharia bank in East Java occurred due to the perpetrator's lifestyle exceeding his income, opportunities from his position, and weak personal integrity.(Sulistiyo et al., 2020). The results show that although Islamic financial institutions are built on Islamic values, human aspects such as greed and weak supervision still open up opportunities for fraud. Considering the complexity and sensitivity of the Islamic banking sector, an early detection model of fraud is needed that is not only academically accurate but also in line with Islamic values. Therefore, this study focuses on early detection of fraud using the Fraud Triangle Model as an analytical tool to understand the causes and patterns of fraud in the context of Islamic banking. This approach is expected to contribute to efforts to prevent and handle fraud more effectively and ethically.

Literature Review

Fraud Concepts and Theories

According to(Sulistiyo et al., 2020), fraud is defined as an act of cheating that arises due to internal factors of the perpetrator, such as economic pressure, weak supervision, and weak integrity, even in sharia-based financial institutions. Fraud in the context of banking is a fraudulent act carried out intentionally by individuals or groups to gain personal gain or avoid losses in a manner that violates the law.(Larah & Siregar, 2024). The Institute of Internal Auditors defines fraud as any illegal act characterized by deception, concealment, or breach of trust aimed at an interest. Fraud has many types according to the work pattern and abuse committed. From the several definitions above, it can be concluded that fraud is a deviant fraud and an unlawful act where someone does it intentionally to deceive or give a false impression to certain parties, both from outside and within the organization. ACFE divides fraud into 3 large groups, namely:

1. Financial Statement Fraud. Financial statement fraud is a fraudulent act involving presenting financial statements with altered data, such as reducing, adding, or changing actual financial information. Statement Fraud is generally carried out at the upper management level so it is often referred to as corporate fraud.
2. Asset Misuse. Fraud in this group is often carried out by employees alone or in groups to gain personal gain.
3. Corruption. This fraud is generally done with cooperation between employees and outside parties to gain their own benefits. Some types of corruption are as follows:
   a. Conflict of interest refers to when managers and employees act corruptly in business transactions or activities because of personal interests rather than the company.
   b. Illegal gravities are unlawful acts that involve giving something to someone in exchange for a decision that person has made.
   c. Economic oppression is a form of action in which a third party makes threats to employees regarding decisions taken that benefit the third party.(Sianipar et al., 2022).

Fraud Triangle Model

The concept of the Fraud Triangle was first introduced by Donald R. Cressey, a criminologist, in the 1950s through his dissertation entitled Other People's Money: A Study in the Social Psychology of Embezzlement. In his research, Cressey interviewed more than 200 convicts of embezzlement and found that fraud was usually committed by individuals who were in positions of trust, faced financial pressures, and could rationalize their actions as "temporary" or "not directly detrimental" to others. This model is known as the Fraud Triangle, because it consists of three main elements that cause fraud, namely pressure, opportunity, and rationalization.(Wahyuni & Budiwitjaksono, 2017):

1. Pressure. Pressure is a factor that motivates individuals to commit fraud. Pressure is a factor that can arise from outside (external) or from within (internal) the fraud perpetrator himself. The pressure in question can be in the form of coercion or problems that exist in the perpetrator that result in a strong desire from the perpetrator to commit fraud.
2. Opportunity. Opportunity is another factor that allows fraud to occur, because if there is no opportunity, fraud will not occur. This opportunity arises if the implementation of an

entity's internal control is weak. This factor is often the first trigger for fraud. The opportunity factor will be even stronger if the company does not have adequate corporate governance.
3. Rationalization. Rationalization is the process by which individuals convince themselves that their fraudulent actions are justified. One common form of rationalization is financial justification. This rationalization factor can also arise from a lack of management control, especially personnel control.

Here are some of the advantages of the fraud triangle model, including:
1. Easy to Understand and Apply. This model has a simple and logical structure so that it is easy to use by auditors, risk managers, and researchers to analyze the factors causing fraud.
2. Helping Early Detection. By understanding the three main elements (pressure, opportunity, rationalization), organizations can design internal monitoring and control systems to prevent fraud from occurring in the first place.
3. Foundation for Advanced Models. The Fraud Triangle is the main foundation for the development of other models such as the Fraud Diamond and the Fraud Pentagon, which add additional elements such as capability and arrogance.
4. Relevant in Various Contexts. This model can be applied to various sectors, both private companies, public organizations, and financial institutions such as conventional and Islamic banks.

The shortcomings of the fraud triangle model are as follows:
1. Does Not Explain Fraudulent Behavior Comprehensively. This model does not include all factors that cause fraud, such as the perpetrator's capabilities (e.g., power or special skills), which can be determining factors in the success of a fraud act.
2. Lack of Attention to Organizational and Cultural Factors. Not considering the influence of the work environment, organizational culture, and leadership which can also encourage fraud.
3. The Assumption That Perpetrators Always Rationalize Actions. Not all fraudsters need moral justification; some commit fraud consciously without feeling guilty.
4. Individualistic Approach. This model focuses too much on individual internal factors, so it does not capture the systemic or structural dynamics within the organization that contribute to creating space for fraud to occur.

RESEARCH METHODS

This study uses a literature review method, namely by reviewing various scientific sources such as journals, textbooks, and relevant regulations to understand and analyze the concept of the Fraud Triangle in the context of Islamic banking. The main sources analyzed include the classic theory of the Fraud Triangle by Cressey (1953) and the latest development of the model in the context of sharia as explained by Sulistiyo et al. (2020), who studied fraud behavior in Islamic banks through the New Fraud Triangle Model approach. Through this approach, the study aims to formulate a comprehensive and contextual theoretical understanding related to early detection of fraud and internal control systems.

RESEARCH RESULTS AND DISCUSSION

Fraud in Islamic Banking

Islamic banking is a banking system that carries out its business activities based on Islamic sharia principles, especially those related to the prohibition of riba (interest), gharar (uncertainty), and maisir (speculation/gambling), and emphasizes the principles of justice, partnership, and transparency in transactions. According to Law No. 21 of 2008 concerning Islamic Banking, Islamic banks are defined as banking institutions that carry out their operations based on sharia principles. Islamic banks consist of two categories, namely Islamic Commercial Banks and Islamic People's Financing Banks.(Ismail, 2011). Islamic banking in running its operations must always adhere to the following principles; 1) Justice, which means that profits are divided based on real sales according to the contribution and risk of each party. 2) Partnership, where investor customers (fund savers), fund users, and financial institutions themselves are in an equal position as business partners who work together to gain profits. 3) Transparency, Islamic financial institutions will provide financial reports openly and continuously so that investor customers can monitor the condition of their funds. 4) Universal, which means there is no distinction between ethnicity, religion, race, and class in society, in accordance with the principles of Islam as rahmatan lil alamin(Alimusa, 2020). In Islamic banking, fraud can still occur as in the conventional banking system. Although Islamic principles emphasize ethics, honesty, and moral responsibility, fraudulent practices are still possible due to human factors and weaknesses in internal supervision. The following are forms of fraud that can occur in Islamic banking:

1. Fraud in Financing (Financing Fraud). Fraud in financing occurs when customers falsify documents or use funds that are not in accordance with the agreement, such as mudharabah funds that should be used for business but are instead used for personal needs. In murabahah agreements, sometimes there is manipulation of the price of goods to make it look reasonable when in fact it has been marked up unilaterally or secretly.(Syahraeni et al., 2024).
2. Internal Fraud by Bank Employees. Internal fraud by bank employees includes embezzlement, customer identity theft, abuse of authority, and collusion with customers to pass through improper financing. Bribery practices can also occur to obtain incentives or avoid responsibility.
3. Accounting and Financial Reporting Fraud. In financial reporting, fraud can take the form of engineering profit reports, hiding the risk of problematic financing, or manipulating profit sharing so that customers receive less than they should. This undermines the principles of fairness and transparency.
4. Technology and Digital Banking Fraud. Technology-based fraud occurs through data theft, digital account hacking, or misuse of IT systems by insiders. This risk is increasing along with the development of digital banking services.

Fraud in Islamic banking can have a very detrimental impact on the bank itself, customers, and the economic system as a whole. Some of the main impacts that can arise from fraud include:

1. Financial Losses. Fraud can cause significant financial losses for Islamic banks, either in the form of lost funds, legal costs, or reputation restoration costs.
2. Reputational Damage. The reputation of Islamic banks involved in fraud cases can be permanently damaged. The public and customers will lose trust in Islamic banks, which can ultimately reduce the number of customers and stop the flow of funds to the bank.
3. Deviation from Sharia Principles. If fraud is carried out in the form of product manipulation or transactions that violate sharia principles, this can damage the image of sharia banking as a fair financial system free from usury, gharar, and maysir.(Amelia et al., 2024).

Implementation of the Fraud Triangle Model in Islamic Banking

The Fraud Triangle model explains three main elements that drive fraud, namely: pressure, opportunity, and rationalization. This model is also relevant to be applied in the context of Islamic banking, although this institution operates based on Islamic principles. The following are the stages of analysis of the application of the fraud triangle in Islamic banking.

1. The first stage is identifying pressure, which is analyzing various drives or pressures experienced by individuals that have the potential to commit fraud. In the context of Islamic banking, pressure can come from high performance targets, personal economic needs, debt, or a consumptive lifestyle. In addition, pressure can also arise from an unfair or overly competitive work environment.
2. The second stage is the opportunity evaluation, which is to assess the extent to which weaknesses in the internal control system allow fraud to occur. Examples include weak internal audit systems, lack of clear separation of duties, lack of supervision from the Sharia Supervisory Board, and gaps in the information technology system. These opportunities are often exploited by certain employees who have access and understanding of the system.
3. Next is the analysis of justification (rationalization), which is examining the reasons or justifications used by the perpetrators to feel that their actions are acceptable. In Islamic banking, justification can be in the form of the assumption that "everyone else does it", "I just take my rights that are not appreciated", or "I will return this money later". Weaknesses in the internalization of Islamic values can also encourage the formation of justifications like this.
4. The fourth stage is fraud risk ranking, which combines the results of the analysis of pressure, opportunity, and justification to map the parts or work units that are most vulnerable to fraud. From these results, a risk matrix can be prepared to help determine the priority of supervision and audit.
5. Finally, prevention and mitigation recommendations are formulated, which aim to close the opportunity for fraud and strengthen a trustworthy work culture. Recommendations can be in the form of improving SOPs, sharia ethics training, increasing the role of supervision, and more humane organizational policies so that work pressure can be minimized.

Fraud Mitigation Strategy in Islamic Banking

Based on the fraud triangle theory, data fraud occurs because of pressure, opportunity, and rationalization that come together to increase the chance of fraud. However, if one of the three factors is missing, then the possibility of fraud is small. One of the Islamic banks in Indonesia has created an Anti Fraud policy, hereinafter referred to as KAF, which is the main foundation of implementing anti-fraud by preventing, detecting, acting and monitoring. The main foundation of implementing this anti-fraud strategy has 4 pillars of control system, namely: 1) Fraud prevention; 2) Fraud detection; 3) Fraud investigation, reporting and imposition of sanctions; 4) Fraud monitoring, evaluation and follow-up(Lestari & Lestari, 2025). In addition, there are several efforts to minimize fraud in Islamic banking, including:

1. Create and implement a clear and continually updated anti-fraud policy.
2. Conduct anti-fraud training for all employees, including upper management, to raise awareness of potential fraud and how to prevent it.(Wibowo, 2023).
3. Creating good internal control, if there is no good internal control system that is immune to fraud and its effectiveness is very dependent on the competence of the people in the bank who must ensure that the internal control system is appropriate.

4. Building barriers for collusion to occur, collusion is usually built not in a very short time. And what must be done is to rotate personnel (job transfer) so that fraudulent actions will be difficult to do.
5. To provide information to customers regarding bank policies, banks can periodically send letters to customers regarding the company's policy of not accepting any type of bribes.
6. Personnel supervision, by monitoring the lifestyle of each personnel and the facilities around them, banks can take preventive measures. Because in this way, personnel who commit fraud will feel that they are being watched at all times.
7. Create a special channel for reporting fraud, when personnel feel that their colleagues or other parties have an easy way to do this, then the personnel will reduce their intention to do this.
8. Creating expectations of punishment, firm punishment will make personnel think twice about carrying out their intentions.
9. Proactive fraud editing, proactive audits are expected to build awareness among personnel that what they do can still be improved.(Hasanah, 2020).

The Role of Regulation and Government in Detecting Fraud in Islamic Banking

The government, through financial and regulatory authorities, has a central role in detecting and preventing fraudulent practices in Islamic banking. In the Indonesian context, this role is carried out by institutions such as the Financial Services Authority (OJK), Bank Indonesia (BI), and the National Committee for Islamic Finance (KNKS) which function to design regulations, supervise the implementation of sharia principles, and ensure that the supervisory system runs effectively. Strict regulations and a transparent reporting system are important foundations for minimizing the gaps for fraud. One of the important regulations is POJK No. 1/POJK.07/2013 concerning Consumer Protection in the Financial Services Sector, which requires financial institutions including Islamic banks to implement the principles of transparency, accountability, and internal control. In addition, POJK No. 18/POJK.03/2016 concerning the Implementation of Risk Management for Islamic Commercial Banks also requires Islamic banks to develop risk mitigation strategies including operational risks such as fraud. The government through OJK also encourages the implementation of the Whistleblowing System (WBS) and periodic internal audits as an effort to detect fraud early. Furthermore, the government encourages the digitalization of reporting and supervision through technology-based reporting systems such as the Financial Information Service System (SLIK) and the Core Banking System, which enable real-time detection of transaction anomalies. The active role of external and internal auditors is also emphasized by regulations, including the obligation to report indications of fraud to the OJK. Thus, government regulations and interventions not only function as controls, but also as drivers for the creation of trustworthy and accountable Islamic banking governance in accordance with Islamic values.

CONCLUSION

This study shows that the application of the Fraud Triangle Model consisting of three main elements: pressure, opportunity, and rationalization, is very relevant to detect and analyze potential fraud in Islamic banking. Although Islamic banking is based on Islamic ethical and spiritual values, in reality there are still gaps for fraud to occur, both internal and external to the institution. This is caused by human factors and weaknesses in the internal control system. Pressure often arises from financial needs or lifestyles that exceed income, which drives individuals to look for shortcuts. Opportunities arise due to weak internal bank supervision and control systems, while rationalization occurs when the perpetrator feels that the actions taken can be justified personally or are considered not to be significantly detrimental. Therefore, to minimize the potential for fraud, Islamic banking needs to strengthen corporate governance, build a supervisory system based on Islamic values, and develop an organizational culture that prioritizes integrity and accountability. This study provides implications that Islamic banking management needs to pay attention to three main aspects in preventing fraud. First, managing employee stress by creating a healthy work environment and adequate welfare system. Second, strengthening the internal control system through periodic audits, separation of duties, and a transparent reporting system. Third, building a work culture based on Islamic values with ethical and spiritual training so that employees have high integrity. With these steps, the potential for fraud can be reduced and public trust in Islamic banks can be increased.

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