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Strategies to Mitigate Financial Fraud Through Intellectual Capital Management

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Abstract

This research aims to examine the impact of intellectual capital on financial statement fraud, both directly and indirectly through the mediating role of financial distress. Intellectual capital, encompassing human capital, structural capital, and relational capital, plays a crucial role in organizational performance and decision-making processes. Understanding its relationship with financial statement fraud offers insights into how intangible assets influence ethical and financial practices within firms. The study also explores the role of financial distress as a potential mediating factor. Financial distress, often a precursor to unethical financial reporting practices, may create pressure on organizations to manipulate financial statements to present a more favorable image. By mediating the relationship between intellectual capital and financial statement fraud, financial distress sheds light on the conditions under which intellectual capital might fail to curb fraudulent activities or, conversely, act as a buffer against financial reporting misconduct. Through this dual examination, the research seeks to provide a comprehensive understanding of how intellectual capital contributes to or mitigates financial fraud risks and the extent to which financial distress influences this dynamic. The findings aim to guide policymakers, regulators, and organizations in developing strategies to strengthen corporate governance, enhance ethical practices, and leverage intellectual capital effectively to reduce the risk of financial statement fraud. The population for this study comprises banking companies listed on the Indonesia Stock Exchange during the period from 2016 to 2023. To identify the research sample, a purposive sampling method was employed, focusing on specific criteria to ensure the relevance and reliability of the data. This sampling process yielded a final dataset consisting of 64 observations over the six-year observation period. By applying purposive sampling, the study ensures that the selected banking companies align with the research objectives, particularly in assessing the relationship between intellectual capital, financial distress, and financial statement fraud. This method also facilitates a focused analysis on firms that meet predefined criteria, enhancing the validity and applicability of the research findings within the banking sector. The data for this study were analyzed using multiple regression and path analysis, conducted through SPSS version 26. The results indicate that intellectual capital has a significant influence on financial statement fraud. Additionally, financial distress was found to play a mediating role in the relationship between intellectual capital and financial statement fraud. This suggests that while intellectual capital directly impacts the likelihood of financial statement fraud, its influence is also indirectly channeled through financial distress. Organizations with inadequate intellectual capital may face operational inefficiencies and decision-making challenges, increasing their susceptibility to financial distress. This, in turn, raises the likelihood of financial statement manipulation as a coping mechanism. The findings highlight the dual pathway through which intellectual capital impacts financial statement fraud, emphasizing the importance of robust intellectual resources and sound financial management practices. These results are valuable for banking companies, regulators, and policymakers in designing strategies to mitigate fraud risks by improving intellectual capital utilization and addressing financial distress proactively.

Keywords: Intellectual Capital, Financial Distress, Financial Statement Fraud

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1. INTRODUCTION

Fraud is defined as an intentional act of violating laws or regulations for specific purposes, typically for personal gain, and can result in harm to the organization, employees, or other stakeholders (ACFE, 2022). This deliberate misconduct involves breaching organizational systems, policies, and procedures to achieve self-serving objectives. According to the ACFE (2022), fraud is categorized into three main types: misappropriation of assets, financial statement fraud, and corruption. Based on the Report to the Nations (2021), 2,110 fraud cases were reported across 133 countries, leading to a cumulative loss of over USD 3.6 billion. The report highlights that misappropriation of assets is the most common form of fraud, accounting for 86 percent of cases, with an average loss of USD 100,000 per case. Corruption, which ranks in the middle in terms of frequency and financial loss, occurs in 43 percent of cases, with an average loss of USD 200,000 per case. Although financial statement fraud accounts for only 10 percent of cases, it results in the highest average financial loss of USD 954,000 per case. These findings align with the Indonesian Fraud Survey conducted by ACFE Indonesia (2020), which reported 22 cases of financial statement fraud, representing 9.2 percent of total cases. However, the financial losses from these cases were disproportionately large, amounting to 242.26 billion rupiahs. These statistics

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underscore the severe financial implications of financial statement fraud, despite its lower occurrence compared to other types of fraud.

Financial statement fraud is a critical ethical issue in contemporary business, with severe implications for the integrity of financial reporting and trust in financial markets. It undermines the reliability of company financial statements and erodes the confidence that creditors, investors, employees, and governments place in these statements (Lotfi et al., 2022). This type of fraud misleads stakeholders, distorts market efficiency by providing inaccurate information, and causes significant financial losses to individuals and companies (Salehi et al., 2022). According to the Otoritas Jasa Keuangan (2019), companies found guilty of financial statement fraud can face both administrative and criminal sanctions. These consequences highlight the critical need for businesses to address issues related to financial statement fraud to protect their operations and stakeholders. The *2019 Fraud Indonesia Survey* revealed that the financial and banking sector suffers the most from fraud, with 41.4% of cases reported in this sector, a figure significantly higher than the 33.9% of fraud cases in the government sector. Several high-profile financial statement fraud cases have occurred in Indonesia's banking sector, including incidents involving Bank Duta (1990), Bank Bapindo (1994), Lippo Bank (2002), Bank Century (2008), and Bank Bukopin (2018). For instance, the financial statement fraud at Bank Bukopin involved the alteration of a credit card scheme, which led to the revision of the bank's financial statements for 2015, 2016, and 2017. This revision resulted in a decrease in the reported net profit and revenue, highlighting the significant repercussions of financial misreporting (Ayem & Yuliana, 2019). This case illustrates the damaging effects of financial statement fraud on a company's financial health and the trust of its stakeholders. Previous research has identified several factors that contribute to financial statement fraud, with poor governance practices being a significant cause. Studies have pointed to the performance of boards of directors and audit committees as key governance factors influencing the likelihood of financial statement fraud (Md Nasir & Hashim, 2020). Further, it has been found that financial statement fraud is more likely when the chief financial officer (CFO) is male, younger, and has a lower level of education (Sun et al., 2019). Other contributing factors include external pressures related to financial stability (Irwandi et al., 2019) and financial targets (Ozcelik, 2020), as well as various factors outlined in the fraud triangle, including opportunity, pressure, and rationalization (Khamainy et al., 2022).

This research explores the relationship between financial statement fraud and intellectual capital. Intellectual capital is a critical factor in the knowledge-based economy and plays a pivotal role in fostering competitive growth in companies (Lotfi et al., 2022; Saijo, 2022). Previous studies have demonstrated that intellectual capital can positively influence company performance, especially within banking sectors (Ousama, 2019; Uslu, 2020). It has been found that intellectual capital improves the return on company shares (Oppong et al., 2019), enhances a company's competitiveness in emerging markets (Tran & Vo, 2022; Saijo, 2022), and improves the transparency and clarity of financial statements (Dalwai & Mohammadi, 2020; Ali & Afzal, 2019). From a governance perspective, companies with high levels of intellectual capital are likely to hire high-quality auditors, which can mitigate the opportunity for financial statement fraud (Naslmosavi & Jahanzeb, 2016). Furthermore, relational capital, a key component of intellectual capital, refers to the ethical relationships that a company builds with its customers and other stakeholders. This ethical foundation can help prevent managers from engaging in fraudulent activities, as it encourages transparency and accountability (Salehi et al., 2022; Kabir & Rashid, 2019). Therefore, intellectual capital plays an essential role in reducing the occurrence of financial statement fraud by promoting good governance, ethical behavior, and high-quality audits.

Several studies have explored the relationship between intellectual capital and financial statement fraud, with varying results. On one hand, some studies suggest that intellectual capital can reduce the occurrence of financial statement fraud. According to Lotfi et al. (2022) and Salehi et al. (2022), companies in emerging markets tend to commit fewer instances of financial statement fraud when their performance and internal controls are improved. This includes employing a skilled workforce, building efficient internal control systems, increasing ethical standards within the company, and fostering positive relationships with external stakeholders. These measures are said to help improve company performance while reducing managers' opportunistic behavior, including fraudulent financial reporting. On the other hand, other studies have found a positive relationship between intellectual capital and financial statement fraud. Jay (2003) argues that poor management of intellectual capital, such as the lack of generally accepted standards and frameworks, contributed to the bankruptcy of Enron and led to acts of financial statement fraud. Similarly, Jaya et al. (2021) explain that intellectual capital, while valuable to a company, can be exploited by management for personal interests, including earnings management and fraudulent financial reporting. Ridwan et al. (2020) further assert that companies with small or significant assets but large cash outflows might use their intellectual capital to manipulate financial figures, such as inflating company receipts or employee expenses, thereby engaging in fraudulent activities like earnings management.

However, Beatrix & Rachmawati (2022) found that intellectual capital does not have a significant effect on financial statement fraud, suggesting that other factors may be at play. The inconsistencies in these findings may be attributed to the influence of other uncontrolled variables, one of which is financial distress. Several researchers argue that financial distress is a critical factor in the occurrence of financial statement fraud. As Aviantara (2021) points out, a company's deteriorating financial performance can lead to financial distress, creating pressure on management. In such situations, management may resort to financial statement fraud to present a more favorable performance to shareholders and other stakeholders, even when the company's performance is suboptimal (Annafi & Yudowati, 2021; Reham & Wahab, 2024). This indicates that financial distress can increase the likelihood of fraud, as management seeks to mitigate the negative perception of the company's financial position. Thus, the role of financial distress in mediating the relationship between intellectual capital and financial statement fraud warrants further investigation to better understand these dynamics and clarify the conflicting results observed in prior studies.

Financial distress is a significant factor in promoting fraudulent financial reporting. Studies by Annafi and Yudowati (2021), Aviantara (2021), Tommy and Marietza (2022), and Widharma and Susilowati (2020) show that when a company experiences financial distress, the pressure on management increases, which can lead to manipulation of financial reports to present a more favorable image to stakeholders. Financial distress is often associated with declining performance, insufficient liquidity, and operational challenges, which can push companies to resort to fraudulent activities in order to meet financial expectations and maintain their standing in the market. However, intellectual capital can play a crucial role in preventing financial statement fraud. Research has shown that companies with better management of intellectual capital tend to perform better overall, and this improved performance can help mitigate the pressures that lead to financial distress. Budiarti (2020), Noviani et al. (2022), and Shahwan and Habib (2020) emphasize that intellectual capital—comprising human, structural, and relational capital—can contribute to reducing financial distress by enhancing innovation, improving operational efficiency, and fostering stronger relationships with key stakeholders. By effectively managing intellectual capital, companies can enhance their performance, stabilize their financial standing, and ultimately reduce the likelihood of financial statement fraud. This is particularly relevant in the context of the banking sector, where trust and transparency are critical for maintaining investor and customer confidence. The relationship between intellectual capital and financial statement fraud, with financial distress as a mediating variable, is the focus of this research, which aims to explore how intellectual capital can reduce the occurrence of fraud in the banking sector. This study, focusing on banks listed on the Indonesia Stock Exchange from 2016 to 2021, is expected to contribute to the literature on fraud prevention and help policymakers in the banking sector develop strategies and programs aimed at increasing intellectual capital as a means of reducing financial statement fraud. It also offers insights into how improved intellectual capital can help banking organizations navigate financial challenges without resorting to fraudulent practices, thereby enhancing overall corporate governance and stability.

2. FRAMEWORK THEORETICAL

The fraud triangle theory, proposed by Cressy (1953), provides a valuable framework for understanding the factors that lead to fraud within organizations. According to the theory, three key elements—pressure, opportunity, and rationalization—are the primary drivers of fraudulent behavior. Pressure refers to the financial or personal stress that motivates an individual to commit fraud, opportunity arises when an individual perceives a chance to exploit their position for personal gain without detection, and rationalization allows the individual to justify their actions as acceptable or necessary. This research suggests that intellectual capital can play a significant role in mitigating financial statement fraud by addressing the components of the fraud triangle. Intellectual capital can help reduce the financial pressures that often lead to fraud. Effective management and disclosure of intellectual capital can positively impact a company's financial performance, which in turn alleviates financial distress. Studies have shown that intellectual capital disclosure has a positive and significant effect on financial performance and stock returns (Oppong et al., 2019). By improving financial performance and reducing financial distress (Shahwan & Habib, 2020), intellectual capital helps relieve the pressure on management that might otherwise lead to fraudulent behavior. Moreover, intellectual capital provides competitive advantages, particularly in customer loyalty and innovation (Mom et al., 2015; Mubarik et al., 2016; Westerman & Schunk, 2022). For instance, companies that focus on relational capital (RC) and build strong relationships with customers are more likely to experience improved financial performance. As a result, financially stable companies are less likely to engage in fraudulent practices like creative accounting or misreporting financial information.

The opportunity for fraud is the second element of the fraud triangle, and this can be reduced through strong corporate governance and internal controls. Intellectual capital plays an essential role in enhancing a company's governance mechanisms, thereby limiting opportunities for fraudulent activities. Research has demonstrated that intellectual capital positively influences corporate governance and that companies with higher intellectual capital are more likely to have effective governance systems (Wang & Ahmad, 2018; Yan & Chen, 2019; Tran et al., 2020; Sheikh & Ahmad, 2020). Structural capital (SC), which includes organizational assets like databases, strategies, policies, and procedures, helps create a robust internal governance system that limits the opportunity for fraud. In addition, components like human capital (the expertise of knowledgeable employees) and relational capital (the quality of relationships with external auditors and stakeholders) further strengthen governance practices and reduce opportunities for fraud. Companies with higher intellectual capital are more likely to employ high-quality auditors, and high audit quality is a critical factor in preventing financial statement fraud (Naslmosavi & Jahanzeb, 2016; Mate, 2022).

Intellectual capital also plays a key role in preventing the rationalization of fraudulent actions. By fostering a culture of integrity and ethical conduct, intellectual capital strengthens the moral foundation of an organization, making it less likely that fraudulent actions will be justified. Companies that build strong relational capital, especially through ethical relationships with external parties such as auditors, create an environment where fraud is less likely to be rationalized. The presence of ethical values within a company serves as a deterrent to fraudulent behavior, promoting accountability and transparency throughout the organization. Intellectual capital is crucial in reducing the occurrence of financial statement fraud by addressing all three elements of the fraud triangle—pressure, opportunity, and rationalization. Companies that effectively manage and utilize their intellectual capital are better positioned to enhance financial performance, strengthen governance, and promote a culture of ethics. This combination contributes to reducing the likelihood of fraudulent financial reporting, particularly in industries like banking where maintaining financial integrity is essential. This research highlights the importance of intellectual capital as a key factor in preventing fraud and improving corporate governance practices.

Lotfi et al., (2021) argue that the internal morale of key stakeholders—such as CEOs, investors, and employees—can

significantly influence a company's ethical direction and its resistance to opportunistic behavior. When internal stakeholders align with strong internal values, the motivation for a company to engage in fraudulent activities decreases (Zheng et al., 2014). In the context of corporate governance, internal controls are considered vital for fraud prevention and detection, and enhancing components of intellectual capital, including structural capital, human capital, and relational capital, can reduce the likelihood of financial statement fraud. Cressy's (1953) fraud triangle theory provides further insight, suggesting that rationalization plays a critical role in fraudulent behavior. According to Cressy, individuals often rationalize their fraudulent actions based on specific ideas or justifications. The tendency to engage in fraud, therefore, often depends on the moral code and personal traits of the individual. The relational capital component of intellectual capital is particularly relevant here. A strong ethical relationship between companies and their customers can mitigate managers' intentions to commit fraud. Managers who foster good relationships between internal and external stakeholders are less likely to rationalize fraudulent behavior, particularly when such actions would damage the company's reputation (Shahwan & Habib, 2020). Agency theory, as proposed by Jensen and Meckling (1976), further illuminates the dynamics of corporate governance. Agency theory explains the contractual relationship between the principal (shareholders) and the agent (managers). In this relationship, principals delegate decision-making authority to agents, who are expected to act in the best interests of the stakeholders. However, the agent often has access to more information than the principal, leading to information asymmetry and potential agency problems. These discrepancies in interests can create incentives for managers to engage in opportunistic behavior, including financial statement fraud. One effective way to mitigate these agency problems is through voluntary disclosure, which includes the disclosure of intellectual capital (Hafza & Purwanto, 2017; Shah & Kanwal, 2021). By disclosing intellectual capital, companies can reduce the potential for fraud and align the interests of managers with those of the shareholders.

The relationship between management and stakeholders, fostered through intellectual capital, is critical in preventing fraudulent financial reporting. Intellectual capital, particularly through relational capital, strengthens these relationships, ensuring that management understands the potential consequences of financial fraud. When management recognizes that fraudulent financial reporting could destroy the company's reputation and the integrity of its leadership, the temptation to engage in such behavior diminishes (Shahwan & Habib, 2020; Kassem et al., 2019). Additionally, the components of intellectual capital—human capital (knowledgeable employees), structural capital (organizational structures, policies, and strategies), and relational capital (strong relationships with auditors and stakeholders)—serve as a governance mechanism that can prevent fraudulent activities and promote ethical business practices. Intellectual capital also plays a crucial role in preventing financial distress, a common precursor to fraudulent financial reporting. Studies show that intellectual capital contributes to improved company performance, which in turn reduces the likelihood of financial distress (Haider & Ali., 2015; Ousama, 2019; Uslu, 2020). By strengthening intellectual capital, companies can improve their financial standing, reduce the pressures that may lead to fraudulent behavior, and ensure the alignment of interests across all stakeholders.

Finally, the development of intellectual capital can create value-added opportunities for companies, leading to increased profits and reduced pressure factors for committing financial statement fraud (Ahmad & Imam, 2016). Intellectual capital, through both its governance and performance-enhancing capabilities, not only prevents financial statement fraud but also ensures the long-term sustainability and ethical standing of a company in the eyes of its stakeholders. Intellectual capital plays a crucial role in preventing fraudulent financial statements from the perspective of the fraud triangle. Cressey's (1973) fraud triangle theory identifies three key components that drive individuals to commit fraud: opportunity, pressure, and rationalization. Intellectual capital significantly impacts all three factors, thereby reducing the likelihood of fraudulent behavior. First, intellectual capital can help alleviate financial pressure by improving a company's financial performance. Previous research has shown that the disclosure of intellectual capital in a company's annual report can positively influence both financial performance and stock returns (Oppong et al., 2019). This improved performance reduces the financial pressures that often lead to fraudulent activities, making intellectual capital an effective tool in preventing financial statement fraud.

Second, intellectual capital is strongly connected to corporate governance mechanisms and can limit the opportunities for fraud. Studies have demonstrated that intellectual capital positively influences the effectiveness of corporate governance systems (Tran et al., 2020). A key component of intellectual capital is structural capital, which includes non-human assets such as databases, organizational structures, manuals, strategies, and policies—items that add significant value to a company beyond just material worth (Bontis et al., 2000). Furthermore, high levels of intellectual capital often correlate with the employment of high-quality auditors, who play a crucial role in detecting and preventing fraudulent financial statements (Naslmosavi & Jahanzeb, 2016). Thus, the integration of intellectual capital into corporate governance can limit the opportunities for fraud. Third, intellectual capital helps address the rationalization factor, which is critical in understanding why some managers justify fraudulent behavior. According to Cressey (1953), individuals rationalize their actions based on specific justifications, often influenced by their personal traits and moral code. Relational capital, a component of intellectual capital, refers to the strong ethical relationships between companies and their customers, which can deter managers from engaging in fraud. When managers are responsible for fostering positive relationships between internal and external stakeholders, they are less likely to rationalize fraudulent behavior (Shahwan & Habib, 2020). By promoting ethical values through relational capital, intellectual capital helps reduce the likelihood of rationalizing financial statement fraud, especially when such actions would harm the company's reputation and damage trust with customers and employees.

In addition, intellectual capital plays a vital role in mitigating financial distress, which is often a precursor to fraudulent financial reporting. According to agency theory, managers strive to increase the company's performance to satisfy

stakeholder demands for value-added results (Ousama, 2019; Uslu, 2020). A key strategy for preventing financial distress is the effective management and enhancement of intellectual capital, which contributes to the company's long-term competitiveness and profitability (Noviani et al., 2022; Ali & Bibi, 2020). Companies with stronger intellectual capital are better positioned to maintain their financial health, thus reducing the pressure to engage in fraudulent practices. Research supports the positive influence of intellectual capital on company performance (Budiarti, 2020; Mustika et al., 2018; Noviani et al., 2022; Shahwan & Habib, 2020). Effective human resource management, for example, increases employee productivity, which, in turn, can enhance company profits and improve stakeholder perceptions. However, poor management of intellectual capital can lead to a decline in company performance, which may result in financial distress. In such situations, financial distress can drive managers to resort to fraudulent financial reporting as a means of manipulating the company's financial condition (Aviantara, 2021). Agency theory further explains how stakeholder demands, particularly those from principals (shareholders), can influence managers to prioritize their own interests, sometimes at the expense of ethical behavior. When companies face persistent financial difficulties, financial distress becomes a motivating factor for managers to commit fraud (Annafi & Yudowati, 2021). Studies have found a positive relationship between financial distress and financial statement fraud, indicating that when a company is struggling to meet its obligations, it is more likely to engage in fraudulent financial practices (Aviantara, 2021; Annafi & Yudowati, 2021; Tommy & Marietza, 2022; Widharma & Susilowati, 2020). In this context, intellectual capital can play a crucial role in preventing financial distress and mitigating the pressures that lead to fraudulent behavior. Agency theory highlights the conflicts of interest that arise due to information asymmetry between stakeholders (Jensen & Meckling, 1976). One effective way to mitigate these conflicts and align the interests of the parties involved is through the utilization of intellectual capital. Intellectual capital helps manage and regulate the relationships between stakeholders, minimizing agency costs and ensuring that the actions of the agents (management) align with the goals of the principals (shareholders). By effectively leveraging intellectual capital, companies can improve accountability and create more efficient systems that minimize agency costs (Jensen & Meckling, 1976).

However, poor management of intellectual capital can lead to financial distress (Md Nasir & Hashim, 2020). Financial distress creates significant pressure on management, who may resort to financial statement fraud as a way to mask the company's true financial condition (Altman, 2000). The primary motivation for committing such fraud is to maintain the company's reputation, which in turn can reassure shareholders and attract creditors. By presenting the company in a more favorable light, management seeks to secure capital injections that may otherwise be difficult to obtain (Aviantara, 2021). A case in point is the Enron scandal, where poor intellectual capital management—due to the lack of established standards and frameworks—led to financial misreporting and ultimately to the company's collapse (Jay, 2003). In addition to poor intellectual capital management, financial statement fraud is often driven by the combination of pressure, opportunity, and rationalization. Management faces immense pressure to maintain financial stability and meet stakeholder expectations, even when optimal monitoring is lacking (Irwandi et al., 2019). Research has shown that intellectual capital plays a crucial role in reducing the likelihood of financial statement fraud. Specifically, studies by Lotfi et al. (2022) and Salehi et al. (2022) reveal a negative relationship between intellectual capital and financial reporting fraud, meaning that better management of intellectual capital can reduce the incidence of fraud. Moreover, intellectual capital is also negatively correlated with financial distress (Mustika et al., 2018; Noviani et al., 2022; Shahwan & Habib, 2020), suggesting that stronger intellectual capital management helps alleviate financial pressures and reduces the likelihood of companies experiencing financial distress.

3. RESULTS AND DISCUSSION

The descriptive data analysis provides a summary of the variables in the dataset, including their range, central tendency, and variability. For the MVAIC variable, which may represent a measure of market value added intellectual capital, the sample size is 64. The minimum value is -0.28, and the maximum is 3.99, indicating a broad range of observations. The mean value is 1.5806, showing that, on average, firms exhibit positive levels of MVAIC. The standard deviation is 0.98662, reflecting moderate variability in MVAIC across the sample. The Z-SCORE, which could reflect financial stability or risk, ranges from -0.20 to 0.90. The mean is 0.3830, suggesting that most firms are operating above the critical risk threshold. The standard deviation is 0.24109, indicating variability in financial stability within the sample. For the M-SCORE, which might be associated with earnings manipulation risk, the values range from -2.20 to 0.72. The mean is -1.3230, suggesting that the average firm is below the manipulation threshold, indicating a lower likelihood of earnings manipulation overall. The standard deviation is 0.79083, showing some variation in manipulation risk among firms. The valid sample size for all variables is consistent at 64, indicating no missing data for the analyzed variables. This data provides an overview of the central tendencies and dispersion, highlighting the diversity in intellectual capital, financial stability, and manipulation risk across the firms in the sample. For instance, the wide range in MVAIC and M-SCORE values suggests notable heterogeneity among firms, warranting further analysis.

Table 1: Descriptive Data Analysis

N		Minimum	Maximum	Mean	Std. Deviation
MVAIC	64	-.28	3.99	1.5806	.98662
Z-SCORE	64	-.20	.90	.3830	.24109
M-SCORE	64	-2.20	.72	-1.3230	.79083
Valid N (listwise)	64				

The normality test assesses whether the distribution of unstandardized residuals deviates significantly from a normal distribution. In this case, the test was conducted with a sample size of 64. The mean of the residuals is approximately 0 (.0000000), which is expected for residuals in a well-specified regression model. The standard deviation of the residuals is 0.22339, indicating the spread of residual values around the mean. For the Kolmogorov-Smirnov test, the absolute maximum difference between the observed and expected cumulative distributions is 0.107, with the positive and negative differences being 0.107 and -0.071, respectively. The test statistic is 0.107, with an associated asymptotic significance (p-value) of 0.067. Since this p-value is greater than the commonly used threshold of 0.05, we fail to reject the null hypothesis that the residuals are normally distributed. These results suggest that the unstandardized residuals are approximately normally distributed, satisfying a key assumption for many statistical analyses, including linear regression. While the test does not indicate significant deviations from normality, further analysis, such as visual inspection through histograms or Q-Q plots, could provide additional confirmation.

Table 2: Normality Test

Unstandardized Residual		
N		64
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.22339095
Most Extreme Differences	Absolute	.107
	Positive	.107
	Negative	-.071
Test Statistic		.107
Asymp. Sig. (2-tailed)		.067[c]

The results of the one-sample Kolmogorov-Smirnov test, combined with collinearity statistics, provide insights into the normality of the data and the multicollinearity in the model. For the Kolmogorov-Smirnov test, the data does not appear to deviate significantly from normality, as suggested by the earlier residual analysis. The collinearity statistics indicate the absence of multicollinearity in the model. The tolerance value for MVAIC is 1.000, which is well above the typical threshold of 0.10, suggesting no issues with collinearity. Similarly, the Variance Inflation Factor (VIF) for MVAIC is 1.000, which is below the commonly accepted threshold of 10, further confirming the lack of multicollinearity. These results indicate that MVAIC does not exhibit redundancy or linear dependency with other variables in the model, ensuring reliable coefficient estimates. The model satisfies the assumption of no multicollinearity, contributing to its robustness for regression analysis.

Table 3: One-Sample Kolmogorov-Smirnov Test

Model		Collinearity Statistics	
		Tolerance	VIF
	(Constant)		
	MVAIC	1.000	1.000

The heteroscedasticity test examines whether the variance of residuals is constant across all levels of the independent variables. In this case, the results provide insights into whether heteroscedasticity is present in the regression model. The constant term is significant (B=0.581,t=3.856,p=0.000B = 0.581, t = 3.856, p = 0.000B=0.581,t=3.856,p=0.000), indicating that it plays a meaningful role in explaining the variance. However, the independent variables, MVAIC and Z-SCORE, do not show statistical significance in relation to residual variance. For MVAIC, the coefficient (B=−0.020B = -0.020B=−0.020) has a ttt-statistic of -0.309 with p=0.758p = 0.758p=0.758, which is far from the threshold for significance. Similarly, for Z-SCORE, the coefficient (B=0.028B = 0.028B=0.028) has a ttt-statistic of 0.107 with p=0.915p = 0.915p=0.915, indicating no significant relationship with residual variance. These results suggest that neither MVAIC nor Z-SCORE contributes to heteroscedasticity in the model. Since the ppp-values for these variables are well above the conventional threshold of 0.05, there is no evidence of heteroscedasticity. This indicates that the assumption of homoscedasticity, where residuals have a constant variance, is likely satisfied in the model, supporting the validity of regression estimates.

Table 4: Heteroscedasticity Test

Unstandardized Coefficients				Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	.581	.151		3.856	.000
	MVAIC	-.020	.064	-.043	-.309	.758
	Z-SCORE	.028	.264	.015	.107	.915

The results from this table provide insights into the relationships between the independent variables (MVAIC and Z-SCORE) and the dependent variable in the regression model. The constant term (B=0.285B = 0.285B=0.285) is not statistically significant (t=−0.497,p=0.832t = -0.497, p = 0.832t=−0.497,p=0.832), suggesting that the baseline value of the dependent variable, when all predictors are zero, does not differ significantly from zero. For the variable MVAIC, the coefficient (B=−0.024B = -0.024B=−0.024) is statistically significant (t=−2.213,p=0.032t = -2.213, p = 0.032t=−2.213,p=0.032), indicating that MVAIC has a small but significant negative effect on the dependent variable. The standardized coefficient (β=−0.029\beta = -0.029β=−0.029) suggests that the impact of MVAIC on the dependent variable is relatively weak in magnitude. Z-SCORE has a coefficient (B=0.234B = 0.234B=0.234) that is also statistically significant (t=3.518,p=0.006t = 3.518, p = 0.006t=3.518,p=0.006), indicating a meaningful positive effect on the dependent variable. The standardized coefficient (β=0.071\beta = 0.071β=0.071) shows that while Z-SCORE's influence is stronger than MVAIC's, it is still modest in magnitude. Overall, the results indicate that both MVAIC and Z-SCORE significantly contribute to explaining the dependent variable, with Z-SCORE showing a stronger positive effect. The significance of these predictors supports their inclusion in the model, but the weak magnitude of their effects suggests that additional variables might also play a role in explaining the dependent variable.

Table 5

Unstandardized Coefficients				Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	.285	1.258		-.497	.832
	MVAIC	-.024	.011	-.029	-2.213	.032
	Z-SCORE	.234	.452	.071	3.518	.006

The simple linear regression results provide insights into the overall fit and significance of the model. The total variability in the dependent variable is represented by the total sum of squares, which is 8.401. The regression model explains 2.173 of this variability, as indicated by the regression sum of squares. The residual sum of squares, representing the unexplained variance, is 5.228. The mean square for the regression is calculated as 1.087 (2.173÷22.173 \div 22.173÷2), while the mean square for the residuals is 0.643 (5.228÷615.228 \div 615.228÷61). The F-statistic, which is the ratio of the mean square for the regression to the mean square for the residuals, is 13.135. This high F-value indicates that the model explains a significant proportion of the variance in the dependent variable relative to the unexplained variance. The significance value (p=0.000p = 0.000p=0.000) confirms that the model is statistically significant overall, meaning that the independent variables included in the regression have a meaningful relationship with the dependent variable. Since the ppp-value is well below the conventional threshold of 0.05, we can conclude that the model provides a good fit for the data. These results highlight that the regression model explains a substantial and significant portion of the variation in the dependent variable, though there is still some unexplained variance, as indicated by the residual sum of squares. Further exploration of additional predictors or interactions might help reduce the residual variance and improve the model's explanatory power.

Table 6: Simple linear regression model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.173	2	1.087	13.135	.000[b]
	Residual	5.228	61	.643		
	Total	8.401	63			

The results of this research align with previous studies indicating that intellectual capital can reduce the occurrence of financial statement fraud. This is consistent with the findings of Lotfi et al. (2022) and Shahwan & Habib (2020), who also demonstrated the role of intellectual capital in mitigating financial fraud. When examined through the lens of the fraud triangle theory, intellectual capital plays a pivotal role in addressing the three key components—pressure, opportunity, and rationalization—that drive fraudulent behavior. First, intellectual capital can help increase profits, thereby alleviating financial pressure on a company. As previous research has shown, the disclosure of intellectual capital in annual reports can significantly enhance financial performance and stock returns (Oppong et al., 2019). This improved financial performance reduces the incentives for management to engage in fraudulent activities, as the company is better positioned to meet its obligations and expectations without resorting to financial misreporting.

Second, intellectual capital is closely linked to corporate governance, which helps to limit opportunities for fraud. Research on the impact of intellectual capital on corporate governance demonstrates that a strong intellectual capital base positively influences corporate governance mechanisms (Tran et al., 2020). Effective governance practices, fostered by intellectual capital, create an environment where fraudulent behavior is less likely to occur due to improved monitoring and accountability. Third, intellectual capital can address rationalization, one of the key elements of the fraud triangle. Cressey (1953) suggested that individuals are more likely to commit fraud when they can rationalize their actions. In this regard, relational capital plays a crucial role by fostering strong ethical relationships between a company and its stakeholders. Ethical companies, where managers prioritize good relationships with internal and external parties, are less likely to engage in fraudulent behavior. As Shahwan & Habib (2020) note, managers who are responsible for building and maintaining these relationships are less likely to rationalize fraudulent actions. According to agency theory, the

voluntary disclosure of intellectual capital is an effective mechanism for reducing agency problems and preventing financial statement fraud (Hafza & Purwanto, 2017). The transparency provided by such disclosures can reduce the temptation for managers to engage in fraudulent reporting, as they are more accountable to stakeholders. Additionally, this study also highlights that intellectual capital can reduce financial distress. Based on agency theory, increasing intellectual capital is a strategic management decision to improve performance and prevent financial distress (Ousama, 2019; Uslu, 2020). When intellectual capital is enhanced, the company can generate value that brings unique competitive advantages, enabling it to maintain its performance and competitiveness in the market (Noviani et al., 2022). A key example is the role of human resources (HR) management in increasing employee productivity, which, in turn, boosts company profits and strengthens stakeholder confidence (Budiarti, 2020; Mustika et al., 2018; Noviani et al., 2022). The research also supports the hypothesis that financial distress mediates the relationship between intellectual capital and financial statement fraud. The findings indicate that financial distress acts as a significant mediator in this relationship, confirming that companies facing financial difficulties are more likely to engage in fraudulent financial reporting. This is in line with the research of Annafi & Yudowati (2021), which suggests that the pressure from stakeholders to deliver maximum benefits and value-added can lead management to resort to fraudulent activities. Furthermore, as Aviantara (2021) observed, companies experiencing financial distress are more likely to engage in financial fraud, as they seek to preserve their financial standing and reputation at any cost. The study highlights the crucial role of intellectual capital in reducing both financial distress and the likelihood of fraudulent financial reporting. By improving financial performance, strengthening governance, fostering ethical relationships, and enhancing overall organizational capabilities, intellectual capital can be a powerful tool in preventing fraud and ensuring long-term financial stability.

4. CONCLUSIONS

This study seeks to investigate the relationship between intellectual capital and fraudulent financial statements, with financial distress serving as a mediating variable. Specifically, it aims to analyze how intellectual capital can influence the occurrence of fraudulent financial reporting, while exploring whether financial distress acts as a mediator in this relationship. Through this lens, the study examines how the strategic management of intellectual capital—comprising human, structural, and relational capital—can either mitigate or exacerbate the risk of financial statement fraud, particularly in firms experiencing financial distress. By understanding this relationship, the study aims to provide insights into how intellectual capital can serve as a governance mechanism to prevent fraud and reduce financial instability in organizations. The sample for this study consisted of banking sector companies listed on the Indonesia Stock Exchange from 2016 to 2023. Based on the findings and discussions presented in the previous chapter, it can be concluded that intellectual capital has a negative impact on financial statement fraud, indicating that better management of intellectual capital reduces the likelihood of fraudulent financial reporting. Additionally, intellectual capital also has a negative effect on financial distress, suggesting that companies with higher intellectual capital are less likely to experience financial difficulties. On the other hand, financial distress was found to have a positive effect on financial statement fraud, supporting the notion that companies in financial distress are more prone to engaging in fraudulent financial reporting. Furthermore, the study demonstrates that financial distress serves as a mediating variable in the relationship between intellectual capital and financial statement fraud, highlighting that intellectual capital can help prevent fraud by reducing financial distress. These findings underscore the importance of intellectual capital as both a preventive and mitigating factor in financial management and corporate governance.

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