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DO INTELLECTUAL CAPITAL AND ESG MITIGATE ACCOUNTING FRAUD?

Dicky Wijaya, Tan Ming Kuang*

Universitas Kristen Maranatha, Jl. Surya Sumantri No.65, Bandung 40164

*Korespondensi: tm.kuang@eco.maranatha.edu

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Tan Ming Kuang

Abstrak – Apakah Modal Intelektual dan ESG Mengurangi Kecurangan Akuntansi?

Tujuan Utama – Tujuan dari penelitian ini adalah untuk melihat pengaruh modal intelektual serta peran moderasi ESG terhadap kecurangan akuntansi.

Metode – Penelitian ini menggunakan analisis regresi logistik untuk menganalisis data. Sampel penelitian ini adalah seluruh perusahaan non-keuangan di Indonesia yang mempublikasikan laporan keuangannya secara konsisten dan memiliki skor ESG selama periode 2017-2021.

Temuan Utama – Implementasi ESG memperkuat modal intelektual dalam mengurangi kecurangan akuntansi. Hal ini meningkatkan akuntabilitas dan transparansi perusahaan. Pada sisi lainnya, modal intelektual sendiri tidak mempengaruhi kecurangan akuntansi.

Implikasi Teori dan Kebijakan – Penelitian mengimplikasikan bahwa penerapan ESG adalah upaya perusahaan memenuhi hak para pemangku kepentingan dan meminimalkan konflik agensi. Penelitian ini memberikan implikasi bagi regulator, perusahaan, dan investor untuk menerapkan ESG.

Kebaruan Penelitian – Penelitian ini memiliki kebaruan untuk memosisikan ESG sebagai pemoderasi pengaruh modal intelektual dan kecurangan akuntansi.

Abstract – Do Intellectual Capital and ESG Mitigate Accounting Fraud?

The Main Purpose – This research aims to examine the influence of intellectual capital and the moderating role of ESG on accounting fraud.

Method – This research uses logistic regression analysis to analyze the data. The sample for this research is all non-financial companies in Indonesia that publish their financial reports consistently and have ESG scores during the 2017-2021 period.

Main Findings – The ESG implementation strengthens intellectual capital in reducing accounting fraud. This implementation increases company accountability and transparency. On the other hand, intellectual capital itself does not affect accounting fraud.

Theory and Practical Implications – Research implies that implementing ESG is a company's effort to fulfill the rights of stakeholders and minimize agency conflicts. This research provides implications for regulators, companies, and investors for implementing ESG.

Novelty – This research has the novelty of positioning ESG as a moderating influence of intellectual capital and accounting fraud.



Before making investment decisions, investors and creditors rely on information in financial statements to analyze a company's financial performance (Dimitrijevic et al., 2020; Kirana et al., 2023). However, unethical agents can falsify the information in financial statements, causing harm to others who rely on it. Based on the 2022 ACFE Report, window dressing is the least common type of fraud yet has the highest financial impact compared to other schemes. Fraud on financial statements is still a fascinating study topic since no country is immune to it (Abdullahi & Mansor, 2018). This also suggests that studies examining accounting fraud prevention strategies within companies are worthwhile, and one of the factors worth investigating is intellectual capital (Lotfi et al., 2022; Salehi et al., 2023). This empirical investigation seeks to develop solutions that effectively eliminate fraudulent acts within companies and also contribute to the financial accounting literature, especially in the areas of fraud and ethics. ESG issues, on the other hand, have piqued the interest of various stakeholders (Arif et al., 2020). Companies that apply environmental, social, and governance principles can boost corporate performance in the long term, increasing investor sentiment (Rahi et al., 2022), and reducing earnings management practices (Dimitropoulos, 2022; Mohamed et al., 2020; Velte, 2019). Environmental, social, and governance implementation is expected to help companies improve accountability and transparency, notably in financial reporting (Aksa et al., 2020; Ellili, 2022; Kim et al., 2019; Palacios-Manzano et al., 2021). However, studies conducted to link ESG and intellectual capital to accounting fraud are still inadequate. Therefore, it is interesting to investigate the impact of intellectual capital and ESG practices on the occurrence of fraudulent financial reporting within organizations.

Fraud in financial statements undoubtedly hurts the company's numerous stakeholders. The financial condition of a company must be represented in its financial statements (Pitoyo, 2022). Agency and stakeholder theory are among the theoretical frameworks that drive this study. The contractual relationship between the group providing the task and the entity responsible for carrying it out is explained by agency theory (Eisenhardt, 1989). The assigning group consists of shareholders (principals), while management is the party responsible for fulfilling the work (agents). Shareholders entrust management with the responsibility of continually preserving and expanding the company's value. Agency conflicts can arise when management uses their power to make decisions that benefit them personally rather than shareholders (Badu & Appiah, 2017; Jensen & Meckling, 1976). One aspect that can increase the potential for innovation and credibility of a company's financial reporting credibility is intellectual capital (Al-Khatib, 2022; Salehi et al., 2023). Companies that perform well in terms of

intellectual capital can eventually enhance their entire performance and lower the possibility of financial troubles (Cenciarelli et al., 2018; Nawaz, 2017; Shahwan & Habib, 2020). To preserve the reliability of information in financial reports, organizations with excellent intellectual capital performance tend to hire high-quality auditors. This is also an effect of high intellectual capital performance in lowering the company's degree of financial statement fraud. Stakeholders are parties affiliated with the company who can influence and be influenced by the company's performance (Freeman & Reed, 1983). For businesses to gain a competitive advantage, open access to company information and trust-based relationships with stakeholders is essential (Rahi et al., 2022). Increasing intellectual capital and company ESG performance is expected to reduce agency conflicts through misleading financial reporting and increase stakeholder trust, especially among shareholders.

Numerous studies have been conducted regarding the factors that influence intellectual capital (Ferguson et al., 2020; Kamath, 2017). Previous studies have also discovered the benefits of intellectual capital for company performance (Acuña-Opazo & González, 2021; Campos et al., 2022; Singla, 2020; Tiwari, 2022; Xu & Li, 2022) and innovation capabilities (Al-Khatib, 2022; Almutirat, 2022). Iraq and Iran have conducted studies on the benefits of intellectual capital on accounting fraud, while Indonesia has not (Lotfi et al., 2022; Salehi et al., 2023). Previous studies have also indicated that implementing ESG enhances company performance (Friede et al., 2015; Kalia & Aggarwal, 2023; Lee & Isa, 2023), company value (Aouadi & Marsat, 2018; Fatemi et al., 2018; Li et al., 2018), plus investment efficiency (Ellili, 2022). However, evidence tying ESG to accounting fraud is also limited.

Several significant differences were discovered when compared to the prior studies by Lotfi et al. (2022) and Salehi et al. (2023). Because there are only a few investigations regarding the impact of intellectual capital on accounting fraud in developing countries, this study attempts to offer generalizable conclusions. This study also provides new insights into the parameters that prevent accounting fraud by considering ESG factors. Several studies have discovered a link between ESG variables and corporate earnings management methods (Dimitropoulos, 2022; Mohamed et al., 2020; Velte, 2019). To the author's knowledge, no previous study has used ESG factors as moderators in the relationship between intellectual capital and fraud in financial statements. This is a novel aspect of the present study.

The study goal is to examine the impacts of intellectual capital on accounting fraud and explore the moderating role of ESG in this relationship. The study is expected to make a substantial contribution to the field of fraud by presenting data to support stakeholder and agency theory.

Table 1. The Procedure for Selecting the Sample

Sample Criteria	Total
The listed non-financial companies on IDX between 2017 and 2021	681
Companies that inconsistently reported financial statements in Indonesian Rupiah from 2016 to 2021	(228)
Companies that do not have an ESG performance for the 2017–2021 period	(429)
Total research sample	24
The Total Final Research Sample between 2017 and 2021	120

Furthermore, this study provides companies, regulators, and investors with practical implications about the relevance of ESG investing.

METHOD

The data is taken from quantitative financial statements. Therefore, quantitative methods were used in this investigation. The universe of all companies listed on the IDX served as the study's population. However, the study sample was selected using a non-probability method. This study's sample comprises non-financial companies that have regularly published their financial statements in the Indonesian Rupiah (IDR) from 2016 to 2021 and have ESG performance ratings from 2017 to 2021. The 2022 ACFE study states the Asia-Pacific region, including Indonesia, ranks third in the world for the largest number of fraud instances. The process involved in selecting the study sample is shown in Table 1. This study is designed to offer a comprehensive examination of accounting fraud in Indonesia. Based on the data in Table 1, the application of ESG principles in Indonesia has been relatively low during the last five years. However, the findings of various recent studies that revealed the benefits of these practices have contributed to the current surge in the use of ESG principles in businesses.

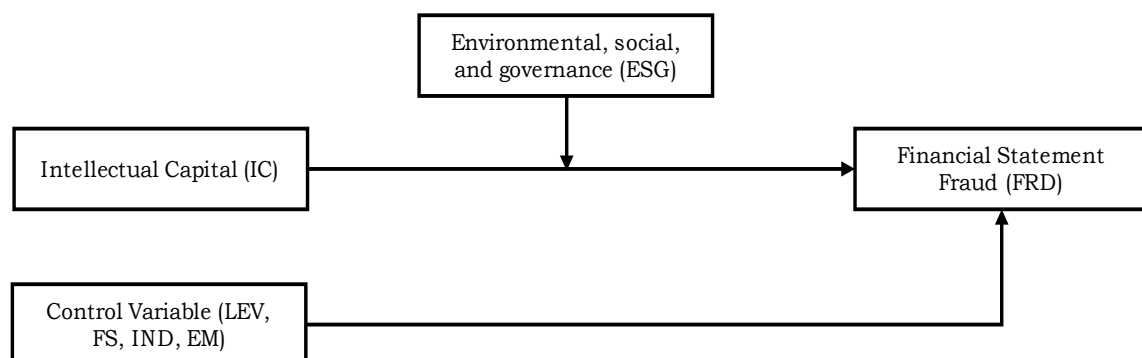
Accounting fraud is the explained variable, intellectual capital performance is the predictor variable, company ESG performance is the moderator, and three control factors were included in the study. The covariates in this investigation include gearing ratio, income growth, and indus-

try type. Figure 1 demonstrates the direct effect of the explained and predictor factors, as well as the moderator on that correlation, and the function of covariates in boosting the determinants in the model. In this study, a logistic regression approach is used to examine the relationship between predictor variables and the outcome variable, which is defined as a categorical variable, accounting fraud. Logistic regression analysis has been chosen based on previous research to examine accounting fraud in companies (Khamainy et al., 2022; Zainudin & Hashim, 2016). The regression model explains the connection between the predictor and the explained variables in a mathematical equation. One of the primary sources in this study for investigating the association between intellectual capital and accounting fraud is the research conducted by Lotfi et al. (2022), which used logistic regression analysis. This research employs two logistic regression models, which are defined mathematically by the following equations:

$$FRD = \beta_0 + \beta_1IC + \beta_2LEV + \beta_3FS + \beta_4IND + \beta_5EM + e \quad (i)$$

$$FRD = \beta_0 + \beta_1IC + \beta_2ESG + \beta_3IC*ESG + \beta_4LEV + \beta_5FS + \beta_6IND + \beta_6EM + e \quad (ii)$$

Accounting fraud (FRD) remains an issue that needs further investigation, given its prevalence in the business world. One of the business frauds with the greatest financial impact is win-

**Figure 1. Research Framework**

dow dressing. To estimate the extent of accounting fraud, many methods are utilized. The M-Score is employed in this investigation to assess the occurrence of financial misrepresentation (Beneish, 1999). This aligns with previous research that employed the M-Score to measure this variable (Khamainy et al., 2022; Rostami & Rezaei, 2022; Salehi et al., 2023). The M-Score itself combines eight financial ratios. The day's sales in receivables index is a monetary metric that measures the amount of time required by a company on average to collect its receivables. An extraordinary increase in this proportion might be a red flag for revenue overstatement. Second, the gross margin index is a financial measurement that calculates the proportion of sales retained by a company after deducting the cost of goods sold. A spike in this percentage might suggest that the company is inflating its gross profit margin, which could be a symptom of fraud. Thirdly, the asset quality index is a metric that evaluates the condition of a company's assets. A larger ratio may indicate the probability of cost deferral fraud. The sales growth index is a ratio that compares the latest sales to previous sales. Abnormal increases in sales may indicate fraud related to a company's sales. To improve a company's financial performance, fraudsters may manipulate SG&A expenses. The index for SG&A expenses can be used to quantify this.

The depreciation index is a financial measurement that indicates how quickly a company's assets depreciate. The high level of this index may suggest that a company is manipulating its depreciation charges, which might be a symptom of fraud. High leverage and financial difficulties may drive companies to manipulate financial statements to prevent default and maintain access to loans. Aggressive accrual accounting practices can indicate inflated profit figures in financial statements, as reflected in the total accruals to total assets index exceeding one. Lu & Zhao (2020) and Ramadhan et al. (2022) state that the eight financial measures used to calculate the M-Score are positively related to the likelihood of a company carrying out unethical financial reporting and companies with a higher M-Score are assigned a value of 1, and vice versa (Khamainy et al., 2022). A company with a high M-Score number has a high chance of management falsifying the company's financial statements. Although this is an attempt to improve the appearance of the company's financial statements and meet shareholder expectations to improve company performance, such actions are inherently immoral and fall within the jurisdiction of agency conflicts. In addition, by providing unreliable information, the company's integrity is harmed, indirectly violating the rights of stakeholders due to limited access to reliable company information.

The researchers have effectively identified the benefits of high intellectual capital (IC) performance for businesses based on past studies

(Acuña-Opazo & González, 2021; Almutirat, 2022; Campos et al., 2022; Singla, 2020; Tiwari, 2022; Xu & Li, 2022). Modified VAIC, a modification of the commonly used Value Added Intellectual Coefficient designed by Ulum et al. (2017), used to analyze intellectual capital performance, based on the study by Salehi et al. (2023). The modified VAIC is a metric that measures how well a company utilizes its intellectual capital. Companies with strong levels of intellectual capital are more likely to have strong internal controls and ethical systems, which helps to reduce the possibility and rationalization of corporate fraud. Companies with strong intellectual capital performance are more likely to engage competent auditors because they understand the value of having independent oversight of their financial statements. Organizations with strong levels of intellectual capital are more likely to enhance their effectiveness through innovation and adaptability than through opportunistic behavior and fraudulent practices. Previous research has found that intellectual capital is a key driver of innovation accomplishment (Al-Khatib, 2022). Companies with high intellectual capital performance are said to be capable of developing effective ways to improve overall company performance while avoiding techniques that distort financial accounts. Indirectly, strong intellectual capital performance increases the company's ability to innovate and reduces agency conflicts between management and shareholders.

Effective ESG performance is considered to improve transparency and accountability within a company. This initiative aims to fulfill stakeholders' rights to trustworthy and reliable company information, notably on the three fundamental pillars of ESG. Management is expected to demonstrate this commitment through the company's financial reporting. Management is also obliged to provide reliable financial information that will eventually help shareholders to make decisions. Strong ESG performance is intended to fulfill stakeholders' rights to truthful information while reducing agency conflicts between management and shareholders. The moderator is assessed using ESG performance ratings acquired from financial market data providers, which have been used in previous research (Dimitropoulos, 2022; Velte, 2019). Annual reports, company websites, and audited corporate social responsibility reports are used to construct the ESG score, which is intended to clearly and effectively measure a company's sustainability performance by concentrating on ten criteria (resource efficiency, pollutants, creativity, management, equity holders, sustainability strategy, personnel, social justice, neighborhood, and responsible product management) (Lee & Isa, 2023). Based on the studies conducted by Salehi et al. (2023) and Khamainy et al. (2022), this study employs gearing ratio (LEV), company size (FS), industry type (IND), and effective monitoring (EM) as the control variables to

Table 2. Descriptive Statistics

Initial Variables	Nadir	Pinnacle	Average	Average Deviation	Occurrence	Proportion	Mode
IC	1,07	12,41	5,573	2,0872			
ESG	13,2	83,7	48,9106	17,022			
IC*ESG	42,71	925,8	272,3845	155,5867			
LEV	0,15	0,89	0,4568	0,1912			
FS	22,41	26,63	24,5338	0,8883			
EM	0,25	0,75	0,5599	0,1492			
FRD	0	99	82,5		99	82,5	0 (Non-Fraud)
	1	21	17,5		21	17,5	
IND	0	65	54,2		65	54,2	0 (Low Risk)
	1	55	45,8		55	45,8	

prevent irrelevant factors from affecting the relationship between the predictors and outcome variables.

RESULTS AND DISCUSSION

Table 2 displays the descriptive statistical testing. The variable representing intellectual capital is denoted as IC. The descriptive statistical analysis of the observed companies' intellectual capital performance reveals a substantial variation between the pinnacle and lowest values, with the average value still considerably distant from the peak. This suggests that the observed performance of business intellectual capital is not distributed evenly. The highest value of intellectual capital performance demonstrates a company's creativity and the ability to improve overall productivity, and vice versa. This outcome is consistent with numerous referenced studies that have identified a favorable connection between knowledge and intangible capital performance, creativity, and overall company accomplishment (Acuña-Opazo & González, 2021; Al-Khatib, 2022; Almutirat, 2022; Campos et al., 2022; Singla, 2020; Tiwari, 2022; Xu & Li, 2022). Furthermore, high intellectual capital performance is believed to have the ability to prevent financial difficulties, which is one of the drivers of accounting fraud (Salehi et al., 2023).

The variables that represent environmental, social, and governance effectiveness are called ESG. A statistical output in Table 2 indicates a significant range between the maximum and minimum values, with the average value also far from the maximum. The ESG performance of the companies observed is considered varied or uneven. A good performance in ESG areas indicates that a company is making efforts to meet the rights of stakeholders to obtain relevant information about the company, especially non-financial information. Additionally, strong ESG performance reflects transparency and accountability. In line with several previous studies, it was found that companies that are increasingly aware of

their responsibilities toward all stakeholders tend to have better-quality financial information (Aksa et al., 2020; Palacios-Manzano et al., 2021). Strong environmental, social, and governance performance is expected to encourage companies to provide reliable financial information in their financial statements.

The dummy variable, abbreviated as accounting fraud, is used to measure financial fraud in business. Companies suspected of unethical financial reporting are assigned the code 1,00, and vice versa. Based on the statistical output in Table 2, the majority of companies in the sample studied are not committing accounting fraud. This classification is based on eight financial ratios used to construct the M-Score, which distinguishes organizations that participate in financial fraud from those that do not. This also suggests that the eight financial ratios used to assess the possibility of fraudulent reporting did not exhibit illogical rises in the companies under consideration. Increases in these eight financial parameters that are irrational suggest an increased possibility of accounting fraud in a company (Lu & Zhao, 2020; Ramadhan et al., 2022).

Companies with a greater degree of leverage have a greater likelihood of committing fraudulent acts involving their financial statements. This is consistent with prior research that identified a link between a company's leverage level and the chance of fraud occurring within the company (Lu & Zhao, 2020; Ramadhan et al., 2022). This is because organizations with significant leverage face a variety of risks that increase the potential for accounting fraud. The first concern is that the company will default if it runs into financial problems. The second concern is that high-leverage companies are more likely to have difficulty getting new sources of capital or extending the term of current obligations. This is also corroborated by the Zainudin & Hashim (2016) study, which suggests that companies with significant leverage may face bankruptcy if they are unable to meet their loan commitments. In such instances, company ma-

Table 3. Logistic Regression Analysis

Initial Variables	Non-moderation	Moderation
Constant	9,703	11,962
IC	-0,099 (0,415)	0,833 (0,074)**
ESG		0,090 (0,139)
IC*ESG		-0,021 (0,045)***
LEV	1,569 (0,292)	4,305 (0,025)***
FS	-0,553 (0,156)	-0,837 (0,055)**
IND	-0,917 (0,099)**	-1,204 (0,040)***
EM	4,061 (0,100)**	3,092 (0,231)

nagement may have a justification for manipulating financial statements to fulfill particular debt covenant standards. Companies may resort to financial statement manipulation to instill trust in the company's financial position among lenders, which can be classified as an agency conflict.

The size of a company can also impact its level of accounting fraud. Companies of a bigger scale have increased transaction complexity, which raises the likelihood of fraud occurring. External forces also demand that managers sustain and even expand their operations. The bulk of the enterprises sampled for this study are rather large-sized businesses. The next aspect is the company's effective monitoring, which is thought to impact the occurrence of accounting fraud. An audit committee must include at least one board commissioner and other individuals who are not affiliated with the firm, according to regulations. This is meant to maintain the audit committee's oversight quality. A larger number of independent members on the audit committee is thought to improve supervision quality and, as a result, minimize the possibility of unethical behavior within the organization, including accounting fraud. This has also been supported by the Khamainy et al. (2022) and Kirana et al. (2023) study, which gave comparable results. To limit the opportunity factor, one of the drivers of fraud within the business, the company's audit committee needs tight control. The industrial type of the company appears to also relate to the risk of fraud incidence. According to ACFE, some industry sectors have a higher risk of financial statement fraud. Code 1 is allocated to companies that are more likely to commit fraud, and vice versa. The majority of the companies analyzed in this study fall into the low-risk category.

The research model has been deemed viable. The logistic regression equation is a statistical tool utilized in this investigation since the independent variables are categorical. The logistic regression equation may be generated using the data in Table 3, and the following equation will be utilized in this study:

$$FRD = 9,703 - 0,099IC + 1,569LEV - 0,553FS - 0,917IND + 4,061EM + e \quad (i)$$

$$FRD = 11,962 + 0,833IC + 0,090ESG - 0,021IC*ESG + 4,305LEV - 0,837FS - 1,204IND + 3,092EM + e \quad (ii)$$

The information in Table 3 is also used to generate the study's conclusions. The findings show a company's knowledge capital has no significant influence on misleading financial reporting. In contrast, ESG performance effectively moderates the connection between knowledge capital and financial misrepresentation. The test findings' significance values fulfill the requirements, providing an answer to the study question. Furthermore, the negative coefficient values of the interaction variable between knowledge capital and ESG performance suggest that it diminishes the likelihood of accounting fraud. As a consequence, integrating ESG practices and successfully managing knowledge capital in businesses are seen as critical measures since they have been shown to reduce the frequency of accounting fraud. The next part will go through the testing that was done in this research in further detail.

Based on the findings of the research reported in Table 3, there is no substantial effect of

knowledge capital performance on the likelihood of accounting fraud. This study contradicts the idea that high intellectual capital performance deters dishonest behavior and contrasts those of Lotfi et al. (2022) and Salehi et al. (2023), who discovered that good performance of knowledge capital is an effective strategy. A company with high intellectual capital performance employs experienced and educated workers who are capable of adapting and innovating strategies to improve company performance and achieve a competitive advantage (Al-Khatib, 2022; Almutirat, 2022). Previous research has shown that excellent intellectual capital performance improves a business' overall productivity (Acuña-Opazo & González, 2021; Campos et al., 2022; Singla, 2020; Tiwari, 2022; Xu & Li, 2022).

Even if a company's intellectual capital is performing effectively, it does not ensure that accounting fraud will not occur. Furthermore, even with improved financial health, the risk of accounting fraud remains, which contradicts the outcomes of Lotfi et al. (2022) and Salehi et al. (2022). Based on that research, high intellectual capital performance improves overall corporate performance and reduces the likelihood of fraudulent acts. In reality, a financially sound condition puts pressure on the organization to continue its current performance. Due to the need to maintain its performance, the company may be forced to participate in fraudulent activities. This might result in the exploitation of possibilities and the optimization of such actions to fulfill the expectations of diverse stakeholders, particularly shareholders. Based on the findings, while high intellectual capital performance in a company is beneficial, it has not been demonstrated to eradicate the elements that contribute to fraud, such as pressure, opportunity, and rationalization.

When linked to the underlying theory of the study, the research findings reveal that a company's excellent performance in intellectual capital is incapable of dealing with agency conflicts between agents and principals. When management actions relating to the company differ from shareholder expectations, agency conflicts emerge (Badu & Appiah, 2017; Jensen & Meckling, 1976). Accounting fraud is one such act that is incongruous with shareholder expectations. Employees' education and experience do not ensure that their judgments are made in the best interests of the organization. Financial statements should accurately represent the company's current situation (Pitoyo, 2022). Financial statements have a large influence on public judgments, particularly those made by shareholders. Untrustworthy financial statements caused by fraudulent behavior can have an impact on shareholders.

Furthermore, high intellectual capital performance is seen as insufficient for ensuring the fulfillment of stakeholders' rights. Stakeholders are entitled to information about the company. The disclosure of information by a company is a

means for the company to interact with its stakeholders. The information made accessible to the public by a company, including its financial accounts, must be accurate and reliable. Untrustworthy information can cause harm to stakeholders and decrease their trust in the organization. A loss of public trust might limit the company's access to capital and disrupt its operations.

As a result, a company's high intellectual capital performance does not ensure the prevention of accounting fraud. Agency conflicts cannot be successfully resolved, and shareholders' rights to trustworthy and integrity-driven company information cannot be met. A high level of intellectual capital performance is insufficient on its own. It is thought that intellectual capital performance should be compensated through a program that promotes and monitors personnel to emphasize openness and accountability in all company operations, including public information.

The final section will look at how ESG might assist in mitigating the connection between knowledge capital and unethical financial reporting practices. Table 3 shows that ESG fully moderates the link between intellectual capital and accounting fraud. The outcomes of the study reveal that the moderator effectively explains the relationship between previously contradicting factors. This study contradicts the observations of Lotfi et al. (2022) and Salehi et al. (2023), who discovered that intellectual capital alone successfully reduces the level of financial misrepresentation. However, current research shows the necessity of a method to incentivize educated and experienced staff to prevent false financial reporting practices. Several factors contribute to the prevalence of accounting fraud, rendering human resource experience, competency, and roles worthless in combating fraud.

Other reasons, such as pressure, opportunity, and rationalization, might lead to the use of human resources expertise, competence, and positions for accounting fraud. Consequently, companies must efficiently manage their resources to match their aims with the best interests of stakeholders. Implementing ESG policies in the company is one strategy that businesses may adopt. The use of ESG practices is seen as helpful in increasing a company's openness and accountability (Ellili, 2022; Kim et al., 2019). It promotes public confidence, particularly among stakeholders. Increased public trust in a company also has implications for its corporate value. Several studies have revealed consistent evidence showing the favorable impact on business value when ESG principles are implemented (Aouadi & Marsat, 2018; Fatemi et al., 2018).

Companies may successfully use ESG strategies to manage their resources ethically while prioritizing the interests of stakeholders. This is consistent with Dimitropoulos's (2022) study, which implies that companies that are conscious of their responsibilities to all stakeholders would

guarantee that the decisions they make reflect the interests of stakeholders. Previous research has shown that incorporating ESG principles in a company lessens the incidence of earnings management (Mohmed et al., 2020; Velte, 2019). The governance part of ESG principles is regarded as the most important factor in properly minimizing earnings management techniques inside a company. Good governance enables all corporate components, including intellectual capital, to behave in the best interests of stakeholders.

The deployment of ESG principles and a company's intellectual capital are viewed as effective in combating financial misrepresentation. The study's findings support two main theories that were employed. The high performance of a company in intellectual capital and ESG successfully overcomes agency conflicts caused by deceptive financial reporting techniques. The interaction of these variables enables organizations to share credible and trustworthy information, proving their commitment to satisfying stakeholders' rights. One of the various ways companies connect with stakeholders is through information distribution, underscoring the importance of companies ensuring the veracity of the information they reveal, particularly in financial statements. Accordingly, intellectual capital management and ESG practices are seen as critical for organizations seeking to limit the degree of accounting fraud within their company.

In addition to the novelty of this study highlighting the significance of ESG implementation in driving intellectual capital performance within companies to mitigate financial statement fraud practices, this research differs from previous studies. Contrary to the study conducted by Lotfi et al. (2022), our findings do not align, as they discovered a correlation between intellectual capital performance and a reduction in financial statement fraud within companies. These discrepancies may stem from the measurement of intellectual capital performance, which might not be precisely applicable in the Indonesian context. Therefore, future studies could explore alternative measurements to gauge intellectual capital performance accurately in Indonesian companies.

Furthermore, this research's generalizability is limited. This limitation arises due to the relatively limited implementation of ESG principles among Indonesian companies. Additionally, excluding financial sector companies from the research sample could impact the generalizability of findings, as a considerable number of financial entities in Indonesia have already embraced ESG principles. Hence, upcoming studies could consider these factors to achieve more comprehensive results.

CONCLUSION

A company may effectively reduce fraudulent financial reporting activities by managing intellectual capital and achieving high ESG perfor-

mance. Intellectual capital itself is not an effective strategy for preventing fraud within a company. Employees who are well-educated and experienced do not exclude the danger of accounting fraud. They keep the option of making company choices based on their interests. Moreover, this indicates that the factors of opportunity and rationality are not guaranteed to be absent in educated and experienced employees. Nonetheless, this research offers a new point of view on the ESG policies are seen as beneficial for encouraging intellectual capital within a company and reducing accounting fraud. The findings of this study demonstrate the importance of agency and stakeholder theories, demonstrating how management prioritizes the interests of the company and the public over personal agendas. Furthermore, it improves the openness and accountability of the company's publicly disclosed information.

Users of financial statements are harmed by unethical reporting activities because they rely on erroneous and untrustworthy information. The presence of indications of accounting fraud within a company undoubtedly erodes public trust in the company. Impediments to the company's operations and limited access to external financing pose risks. To avoid accounting fraud, the company's management must adopt effective strategies. Accounting fraud may be avoided by effectively managing intellectual capital and implementing ESG principles inside a company. In contrast, the government also needs to formulate policies that can hasten the application of ESG practices in businesses, which are intended to promote sustainability.

REFERENCES

- Abdullahi, R., & Mansor, N. (2018). Fraud Prevention Initiatives in the Nigerian Public Sector: Understanding the Relationship of Fraud Incidences and the Elements of Fraud Triangle Theory. *Journal of Financial Crime*, 25(2), 527–544. <https://doi.org/10.1108/JFC-02-2015-0008>
- Acuña-Opazo, C., & González, O. C. (2021). The Impacts of Intellectual Capital on Financial Performance and Value-added of the Production Evidence from Chile. *Journal of Economics, Finance and Administrative Science*, 26(51), 127–142. <https://doi.org/10.1108/JEFAS-08-2019-0178>
- Aksa, A. F., Irianto, B. S., & Bawono, I. R. (2020). The Urgency of Rationalization for Unethical Behavior and Accounting Fraud. *Jurnal Akuntansi Multiparadigma*, 11(3), 653–664. <https://doi.org/10.21776/ub.jamal.2020.11.3.37>
- Al-Khatib, A. W. (2022). Intellectual Capital and Innovation Performance: The Moderating Role of Big Data Analytics: Evidence from the Banking Sector in Jordan. *EuroMed Journal of Business*, 17(3), 391–423. <https://doi.org/10.1108/EMJB-10-2021-0154>

- Almutirat, H. A. (2022). The Impact of Intellectual Capital in Organizational Innovation: Case Study at Kuwait Petroleum Corporation (KPC). *Review of Economics and Political Science*, 7(1), 34–55. <https://doi.org/10.1108/REPS-08-2019-0113>
- Aouadi, A., & Marsat, S. (2018). Do ESG Controversies Matter for Firm Value? Evidence from International Data. *Journal of Business Ethics*, 151(4), 1027–1047. <https://doi.org/10.1007/s10551-016-3213-8>
- Arif, M., Sajjad, A., Farooq, S., Abrar, M., & Joyo, A. S. (2020). The Impact of Audit Committee Attributes on the Quality and Quantity of Environmental, Social and Governance (ESG) Disclosures. *Corporate Governance (Bingley)*, 21(3), 497–514. <https://doi.org/10.1108/CG-06-2020-0243>
- Badu, E. A., & Appiah, K. O. (2017). The Effects of Board Experience and Independence on Mitigating Agency Conflict. *Journal of Accounting in Emerging Economies*, 7(4), 445–467. <https://doi.org/10.1108/JAEE-08-2016-0072>
- Beneish, M. D. (1999). The Detection of Earnings Manipulation. *Financial Analysts Journal*, 55(5), 24–36. <https://doi.org/10.2469/faj.v55.n5.2296>
- Campos, S., Dias, J. G., Teixeira, M. S., & Correia, R. J. (2022). The Link between Intellectual Capital and Business Performance: A Mediation Chain Approach. *Journal of Intellectual Capital*, 23(2), 401–419. <https://doi.org/10.1108/JIC-12-2019-0302>
- Cenciarelli, V. G., Greco, G., & Allegrini, M. (2018). Does Intellectual Capital Help Predict Bankruptcy? *Journal of Intellectual Capital*, 19(2), 321–337. <https://doi.org/10.1108/JIC-03-2017-0047>
- Dimitrijevic, D., Jovkovic, B., & Milutinovic, S. (2020). The Scope and Limitations of External Audit in Detecting Frauds in Company's Operations. *Journal of Financial Crime*, 28(3), 632–646. <https://doi.org/10.1108/JFC-11-2019-0155>
- Dimitropoulos, P. E. (2022). Corporate Social Responsibility and Earnings Management in the EU: a Panel Data Analysis Approach. *Social Responsibility Journal*, 18(1), 68–84. <https://doi.org/10.1108/SRJ-04-2020-0156>
- Eisenhardt, K. M. (1989). Agency Theory : An Assessment and Review. *Academy of Management*, 14(1), 57–74. <https://doi.org/10.2307/258191>
- Ellili, N. O. D. (2022). Impact of ESG Disclosure and Financial Reporting Quality on Investment Efficiency. *Corporate Governance (Bingley)*, 22(5), 1094–1111. <https://doi.org/10.1108/CG-06-2021-0209>
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG Performance and Firm Value: The Moderating Role of Disclosure. *Global Finance Journal*, 38(1), 45–64. <https://doi.org/10.1016/j.gfj.2017.03.001>
- Freeman, R. E., & Reed, D. L. (1983). Stockholders and Stakeholders: A New Perspective on Corporate Governance. *California Management Review*, 25(3), 88–106. <https://doi.org/10.2307/41165018>
- Ferguson, R. I., Renaud, K., Wilford, S., & Irons, A. (2020). PRECEPT: A Framework for Ethical Digital Forensics Investigations. *Journal of Intellectual Capital*, 21(2), 257–290. <https://doi.org/10.1108/JIC-05-2019-0097>
- Friede, G., Busch, T., & Bassen, A. (2015). ESG and Financial Performance: Aggregated Evidence from More than 2000 Empirical Studies. *Journal of Sustainable Finance and Investment*, 5(4), 210–233. <https://doi.org/10.1080/20430795.2015.1118917>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/https://doi.org/10.1016/0304-405X(76)90026-X)
- Kalia, D., & Aggarwal, D. (2023). Examining Impact of ESG Score on Financial Performance of Healthcare Companies. *Journal of Global Responsibility*, 14(1), 155–176. <https://doi.org/10.1108/JGR-05-2022-0045>
- Kamath, B. (2017). Determinants of Intellectual Capital Disclosure: Evidence from India. *Journal of Financial Reporting and Accounting*, 15(3), 367–391. <https://doi.org/10.1108/jfra-01-2016-0003>
- Khamainy, A. H., Ali, M., & Setiawan, M. A. (2022). Detecting Financial Statement Fraud through New Fraud Diamond Model: The Case of Indonesia. *Journal of Financial Crime*, 29(3), 925–941. <https://doi.org/10.1108/JFC-06-2021-0118>
- Kim, S. H., Udawatte, P., & Yin, J. (2019). The Effects of Corporate Social Responsibility on Real and Accrual-based Earnings Management: Evidence from China. *Australian Accounting Review*, 29(3), 580–594. <https://doi.org/10.1111/auar.12235>
- Kirana, M., Toni, N., Afiezan, A., & Simorangkir, E. N. (2023). Apakah Teori Kecurangan Hexagon Efektif Mencegah Manipulasi Laporan Keuangan Perusahaan BUMN? *Jurnal Akuntansi Multiparadigma*, 14(1), 87–97. <https://doi.org/10.21776/ub.jamal.2023.14.1.06>
- Lee, S. P., & Isa, M. (2023). Environmental, Social and Governance (ESG) Practices and Financial Performance of Shariah-Compliant Companies in Malaysia. *Journal of Islamic Accounting and Business Research*, 14(2), 295–314. <https://doi.org/10.1108/JIABR-06-2020-0183>
- Li, Y., Gong, M., Zhang, X. Y., & Koh, L. (2018). The Impact of Environmental, Social, and Governance Disclosure on Firm Value: The Role of CEO Power. *British Accounting Review*,

- 50(1), 60–75. <https://doi.org/10.1016/j.bar.2017.09.007>
- Lotfi, A., Salehi, M., & Dashtbayaz, M. L. (2022). The Effect of Intellectual Capital on Fraud in Financial Statements. *The TQM Journal*, 34(4), 651–674. <https://doi.org/10.1108/TQM-11-2020-0257>
- Lu, W., & Zhao, X. (2020). Research and Improvement of Fraud Identification Model of Chinese A-share Listed Companies Based on M-score. *Journal of Financial Crime*, 28(2), 566–579. <https://doi.org/10.1108/JFC-12-2019-0164>
- Mohmed, A., Flynn, A., & Grey, C. (2020). The Link between CSR and Earnings Quality: Evidence from Egypt. *Journal of Accounting in Emerging Economies*, 10(1), 1–20. <https://doi.org/10.1108/JAEE-10-2018-0109>
- Nawaz, T. (2017). Intellectual Capital, Financial Crisis and Performance of Islamic Banks: Does Shariah Governance Matter? *International Journal of Business and Society*, 18(1), 211–226. <https://doi.org/10.33736/ijbs.497.2017>
- Palacios-Manzano, M., Gras-Gil, E., & Santos-Jaen, J. M. (2021). Corporate Social Responsibility and Its Effect on Earnings Management: an Empirical Research on Spanish Firms. *Total Quality Management and Business Excellence*, 32(7–8), 921–937. <https://doi.org/10.1080/14783363.2019.1652586>
- Pitoyo, M. M. T. Y. (2022). Pentingkah Rasio Keuangan bagi Harga Saham di Masa Pemulihan Ekonomi? *Jurnal Akuntansi Multiparadigma*, 13(3), 533–544. <https://doi.org/10.21776/ub.jamal.2022.13.3.39>
- Rahi, A. F., Akter, R., & Johansson, J. (2022). Do Sustainability Practices Influence Financial Performance? Evidence from the Nordic Financial Industry. *Accounting Research Journal*, 35(2), 292–314. <https://doi.org/10.1108/ARJ-12-2020-0373>
- Ramadhan, M. S., & Mulyati. (2022). Optimalkah Proses Audit Forensik dan Investigasi selama Covid-19? *Jurnal Akuntansi Multiparadigma*, 13(2), 263–276. <https://doi.org/10.21776/ub.jamal.2022.13.2.20>
- Rostami, V., & Rezaei, L. (2022). Corporate Governance and Fraudulent Financial Reporting. *Journal of Financial Crime*, 29(3), 1009–1026. <https://doi.org/10.1108/JFC-07-2021-0160>
- Salehi, M., Al-Msaifir, H. A. M., Homayoun, S., & Zimon, G. (2023). The Effect of Social and Intellectual Capital on Fraud and Money Laundering in Iraq. *Journal of Money Laundering Control*, 26(2), 227–252. <https://doi.org/10.1108/JMLC-12-2021-0142>
- Shahwan, T. M., & Habib, A. M. (2020). Does the Efficiency of Corporate Governance and Intellectual Capital Affect a Firm's Financial Distress? Evidence from Egypt. *Journal of Intellectual Capital*, 21(3), 403–430. <https://doi.org/10.1108/JIC-06-2019-0143>
- Singla, H. K. (2020). Does VAIC Affect the Profitability and Value of Real Estate and Infrastructure Firms in India? A Panel Data Investigation. *Journal of Intellectual Capital*, 21(3), 309–331. <https://doi.org/10.1108/JIC-03-2019-0053>
- Tiwari, R. (2022). Nexus between Intellectual Capital and Profitability with Interaction Effects: Panel Data Evidence from the Indian Healthcare Industry. *Journal of Intellectual Capital*, 23(3), 588–616. <https://doi.org/10.1108/JIC-05-2020-0137>
- Ulum, I., Kharismawati, N., & Syam, D. (2017). Modified Value-Added Intellectual Coefficient (MVAIC) and Traditional Financial Performance of Indonesian Biggest Companies. *International Journal of Learning and Intellectual Capital*, 14(3), 207–219. <https://doi.org/10.1504/IJLIC.2017.086390>
- Velte, P. (2019). The Bidirectional Relationship between ESG Performance and Earnings Management – Empirical Evidence from Germany. *Journal of Global Responsibility*, 10(4), 322–338. <https://doi.org/10.1108/JGR-01-2019-0001>
- Xu, J., & Li, J. (2022). The Interrelationship between Intellectual Capital and Firm Performance: Evidence from China's Manufacturing Sector. *Journal of Intellectual Capital*, 23(2), 313–341. <https://doi.org/10.1108/JIC-08-2019-0189>
- Zainudin, E. F., & Hashim, H. A. (2016). Detecting Fraudulent Financial Reporting Using Financial Ratio. *Journal of Financial Reporting and Accounting*, 14(2), 266–278. <https://doi.org/10.1108/jfra-05-2015-0053>