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Fraudulent Financial Reporting in Manufacturing Companies: Does Intellectual Capital Matter?

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Abstract

Manufacturing companies cannot survive market competition if they only utilize tangible resources. The existence of intellectual capital in manufacturing companies plays an important role in increasing the added value that is useful for sustainability and financial performance. Having intellectual capital helps suppress opportunistic behavior that can lead to fraudulent financial statements. Manufacturing companies should optimize intellectual capital to minimize the risk of financial statement fraud. It aims to investigate the relationship between intellectual capital, human capital, structural capital, relational capital, and financial statement fraud. The total research sample selected was 226 companies from a total population of 502. The findings demonstrate that relational and intellectual capital significantly reduce financial statement fraud. The effects of human capital and structural capital, however, are not significant. Having high levels of intellectual capital and relational capital will provide a competitive advantage for manufacturing companies that can prevent opportunistic behavior.

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Introduction

Fraudulent financial statements are a rampant phenomenon in both business and non-business organizations. This fraud is expressed in the presentation of financial reports that contain misstatements and can result in losses for external parties to the company (Tiffani & Marfuah, 2015). In recent decades, global financial reporting fraud cases involving Enron and WorldCom and the subsequent collapses have received special attention from regulators, academics, and practitioners worldwide (Nasir et al., 2019). ACFE (2022) stated that global financial reporting fraud cases account for 9 percent of all types of fraud. Still, these frauds provide the most significant average loss compared to other frauds, which is $594,000.00. On the one hand, Indonesia is one of the countries with an unstable economy and has widespread accounting scandal cases (Tiffani & Marfuah, 2015). ACFE (2019) reported 239 financial reporting fraud cases in Indonesia.

The factors causing fraud can be explained through the fraud triangle theory. Three factors cause fraud: pressure, opportunity, and rationalization, making perpetrators deliberately commit fraud (Cressey, 1953). Pressure arises when a company attempts to conceal its financial instability by manipulating its financial data, suggesting it can effectively manage its assets (Tiffani & Marfuah, 2015). Then the second factor is the opportunity to commit fraud caused by lack of management supervision, weak internal control, chaotic audit procedures, and lack of work discipline (Petraşcu & Alexandra, 2014). Employees rationalize their fraudulent behavior on the pretext of the absence of rules regarding information and awareness, criminal culture, and employee actions to cheat based on the company's success (Cooper et al., 2013).

Intellectual capital can contribute to the presence of opportunity and rationalization factors, thereby alleviating pressure factors (Lotfi et al., 2022; Salehi et al., 2023). IC has become a vital resource for companies, surpassing physical capital in its impact on productivity and competitiveness in terms of economic knowledge (Onuoha et al., 2020). Improving IC capabilities and efficiency can enhance a company's performance and give it a competitive edge, resulting in increased tangible and intangible assets (Lu, Wang, Tung, and Lin, 2010). Salehi et al. (2023) argue that intellectual capital can help prevent fraudulent financial reporting by discouraging opportunistic behavior in businesses. Firms with considerable intellectual capital frequently employ highly skilled and educated professionals, which decreases the likelihood of fraud arising from situations and justifications (Salehi et al., 2023). Intellectual capital leads to good financial performance and increases the company's profitability. This can reduce the pressure factor in the organization's finances and reduce fraud in financial reporting (Lotfi et al., 2022). In addition, intellectual capital can provide many competitive advantages for the company so that factors arising from triangular fraud can be prevented (Mubarik et al., 2016). Intellectual capital is one of the key economic factors contributing to organizational growth in a competitive environment (Salehi et al., 2022). The presence of IC can facilitate the adoption of Good Corporate Governance by Wahyuni, Melani, Miharso, and Fuadiyah (2021); Dalwai and Mohammadi (2020), ultimately enhancing the quality of a company's auditors (Dharni & Jameel, 2022). Maintaining a strong relationship with knowledge management positively impacts and contributes to the company's operational success (Abualoush, Masa'deh, Bataineh, and Alrowwad, 2018). Businesses with significant intellectual capital will be more likely to withstand unexpected shifts in economic and market conditions (Khan & Ali, 2017). Research conducted in the past has demonstrated that intellectual capital increases a company's performance (Dohamid et al., 2020; Salvi et al., 2020; Ali & Anwar, 2021).

Organizational intellectual capital comprises three categories of intangible assets: human capital, relational capital, and structural capital (Lotfi et al., 2022). The initial component is human capital, which reflects the skills and abilities of employees in their impact on company performance (Obeidat et al., 2017). Reliable financial reports can be generated by leveraging company capabilities to prevent fraud in financial reports. A company's structural capital can influence business decisions and contribute to a nation's economic income (Laursen et al., 2012). Businesses with strong social connections tend to have more selfless values and foster truthful actions, which decreases transaction expenses and financial statement deception (Jha, 2019). Corporate alliance relationships are driven by the crucial value of relational capital (Zahoor & Al-Tabbaa, 2021).

Additionally, as an intangible resource, relational capital can generate value because of the formation of trust and recognition that develops (Catanzaro et al., 2019). These three components are crucial for generating economic value, leveraging globalization, and achieving organizational differentiation advantages (Bambang Tjahjadi et al., 2022). A survey conducted by ACFE (2022) identified that the manufacturing sector is an industrial sector that commits much fraud and is ranked third after the banking and government sectors. This is because the manufacturing industry carries out the production process from raw materials to finished goods. There are many indications of fraudulent actions, such as inventory (Evana et al., 2019). Uncollectible accounts represent a type of estimation that increases the susceptibility to fraud within financial reporting in the manufacturing sector (Evana et al., 2019). However, manufacturing is one of the most knowledge-intensive sectors and has developed rapidly in business (Smriti & Das, 2018). Initially, manufacturing companies concentrated on physical capital as their primary focus because it was the most significant factor contributing to company performance (Xu & Li, 2022). In economic transformation, manufacturers must increase investment in intangible assets, particularly intellectual capital, to enhance corporate performance and preserve their competitive edge (Kafetzopoulos & Psomas, 2015). Intellectual capital will boost a company's innovation, enhancing its value and long-term viability (Dharni & Jameel, 2022). The manufacturing industry has significantly influenced Indonesia's economic growth. In 2021, this sector had the highest GDP contribution, accounting for 19.25 percent (BPS, 2022).

A study examining the impact of intellectual capital and financial reporting fraud was conducted in Iran by Lotfi et al. (2022), and the same study was also conducted in Iraq (Salehi et al., 2023). Research that views IC as a determinant of financial reporting fraud is still limited in Indonesia. The primary objective of this study diverges from earlier research conducted in Indonesia, given that it employs a composite analysis of a company's financial elements through the Beneish model to identify fraud and does not only focus on the calculation of earnings management, which only takes into account the company's total accruals using profit and cash flow to provide more accurate and relevant research results in identifying fraud. Then, previous research still needs to show more consistency in results. Allo and Rachmawati (2022) found that green intellectual capital has no impact on the incidence of fraud in financial statements. Furthermore, researchers contend that green intellectual capital is utilized primarily to gauge its efficacy as a tool and pinpoint potential areas of improvement within the company. Jaya (2021) and Lotfi et al. (2022) indicate that intellectual capital impacts financial statement fraud. Limited research that discusses the relationship between IC and fraud and the inconsistent results this research needs to be conducted further (Allo & Rachmawati, 2022; Lotfi et al., 2022; Salehi et al., 2023; Jaya, 2021).

There are some novelties of this research. First, it is focused on manufacturing companies. Second. This recent timeframe was chosen to provide the most up-to-date research results and understand manufacturing companies' financial condition during the COVID-19 pandemic. Third, The current research uses the original calculation of the Beneish model. This differs from the research conducted by Lotfi et al. (2022) in Iran and Salehi et al. (2023) in Iraq, which used the adjustment Beneish model. This is because the change in components after adjustments to the Beneish model calculation applied in Iran and Iraq cannot be applied in Indonesia. In addition, this study differs from the study of Jaya (2021), which focuses on earnings management in defining financial statement fraud. The current study calculates financial ratios using the Beneish model to determine financial statement fraud. This is because the author wants to know all the financial factors that influence fraud in a company. Fourth, this study introduces the return on equity variable as a control variable not previously included in studies. The addition of this variable is based on ROE in manufacturing companies in Indonesia influencing stakeholder decisions.

According to the previous description, effective intellectual capital management is crucial in preventing financial reporting fraud, particularly in manufacturing firms. This study holds significant importance in mitigating fraudulent activities within corporate settings. This study is driven by the findings of Lotfi et al. (2022), who investigated the impact of intellectual capital on financial reporting fraud in Iran. The main emphasis of this study lies in financial reporting fraud within Indonesia. This research empirically examines the impact of intellectual, human, structural, and relational capital on the indication of financial statement misrepresentation in Indonesian manufacturing firms.

This study contributes to being a reference for research related to the role of intellectual capital in minimizing fraud in financial reports, especially in manufacturing companies. In addition, the results of this study can be used as a reference for company owners and managers in managing and making decisions related to the management of intellectual capital in their business activities to avoid fraud in the company's financial reports. Then, the results of this study can be used as a reference for external parties to make intellectual capital one of the components of assessing and making business decisions.

Literature Review

The Influence of Intellectual Capital on Fraud in Financial Reports

IC has a detrimental influence on fraud in financial statements (Lotfi et al., 2022). Cressey (1953) According to the fraud triangle theory, three key factors can motivate companies to engage in fraudulent activities: financial and non-financial pressures, opportunities arising from inadequate control systems, and a sense of justification. Internal Controls (IC) play a significant role in preventing opportunistic company behavior derived from the fraud triangle theory (Lotfi et al., 2022). According to a study Shahwan and Habib (2020), IC can hinder management's ability to engage in profitable activities or fraudulent actions, thereby mitigating the company's financial challenges. The intellectual capital held by the company is expected to yield numerous competitive advantages associated with its innovation capabilities (Mubarik et al., 2016). Enhancing operational efficiency, this approach reduces organizational expenses and supplies current and prospective data to forecast future expansion and long-term planning strategies (Salehi et al., 2023). Furthermore, Internal Controls play an important role in increasing the reliability of financial statements. Preventing financial report fraud can be achieved through this method, and it may also contribute to increased company profitability (Thien et al., 2024; Salehi et al., 2023).

H1: *Intellectual capital hurts Fraud in Financial Reports*

The Influence of Human Capital on Fraud in Financial Reports

Previous studies have shown an adverse effect caused by increased human capital on fraud in financial reports (Jaya et al., 2021; Lotfi et al., 2022). Then, Cressey (1953) stated in the fraud triangle theory that companies face pressure to achieve goals and maintain a sustainable business (Kurpierz & Smith, 2020). Human capital in a company can also represent the availability of competent, independent, and capable management that can drive company performance (Lotfi et al., 2022; Salehi et al., 2023). Human Capital is linked to a company's capacity to implement business innovations that contribute to its growth, enhance employee productivity, and boost corporate earnings (Ganguly et al., 2019; Collins, 2021; Salehi et al., 2023). Companies with adequate human capital can create value, improving profit quality and productivity (Salehi et al., 2023; Oppong et al., 2019). Furthermore, human capital can alleviate pressure that may lead to company fraud caused by unstable financial conditions (Tiffani & Marfuah, 2015). Investigations suggest that adequate human resources can lower the incidence of deceit in financial reporting.

H2: *Human capital hurts Fraud in Financial Reports*

The Influence of Structural Capital on Fraud in Financial Reports

Previous studies have shown that structural capital hurts fraud in financial reports (Lotfi et al., 2022). Cressey (1953), in the fraud triangle theory, states that opportunities to commit fraud can be prevented and detected through the company's internal control. Structural capital includes the company's internal processes and procedures to identify, manage, monitor, and assess risks, management control systems, and internal process performance (De Luca et al., 2020). Therefore, SC shows a sound company system and internal control (Ganguly et al., 2020). In addition, SC also describes good governance management in the company to reduce the opportunity factor to commit fraud (Zheng et al., 2014; Lotfi et al., 2022).

The fraud triangle theory also explains that companies are pressured to maintain their finances (Cressey, 1953). In this case, SC can reduce the pressure factor in finance and can reduce fraud in financial statements (Lotfi et al., 2022). Structural capital performance in a company includes the creation of an efficient production process so that it can increase innovation and financial performance, ultimately contributing to increased profits (Wang et al., 2014. Structural capital can also prevent the company from committing fraud due to financial difficulties and the drive to improve company performance (Hamdan, 2018).

H3: *Structural capital hurts Fraud in Financial Statements*

The Effect of Relational Capital on Fraud in Financial Statements

Research conducted by Lotfi et al. (2022) found that relational capital hurts instances of fraud in financial statements. Cressey (1953) suggests that rationalization provides a particular perspective that enables managers to justify and implement deceitful actions as being reasonable. Therefore, the tendency to commit fraudulent behavior is related to moral codes and personal values (Mubarik et al., 2016). This approach involves a strong ethical connection between the company and external parties to mitigate the personal inclination of managers to engage in fraudulent activities (Lotfi et al., 2022). In essence, responsible company culture can be fostered if the company has leaders who are accountable and comprehend the importance of ethics in enhancing communication between the company and its employees and between the company and its stakeholders (Godos-Diez et al., 2011). Therefore, with the efficiency of RC in the company, the company will have values and a code of ethics, which, in this case, sees fraud as an unethical act. This is because fraudulent financial statements can mislead users of financial statements. According to Cressey (1953), in the fraud triangle theory, one of the elements that motivates companies to commit fraud is pressure. Based on this, RC can create a competitive advantage for the company by allowing the company and external stakeholders to share benefits and risks (Agostini & Nosella, 2017). Furthermore, RC enables innovation to enhance relationships within and among stakeholders, ultimately optimizing the company's business model (Ganguly et al., 2020). It is, therefore, assumed that RC can prevent fraudulent financial statements.

H4: *Relational capital hurts Fraud in Financial Statements*

Method

The population in this study amounted to 250 manufacturing companies listed on the Indonesian Stock Exchange (IDX). The data was selected using a purposive sampling method, obtaining data from 113 companies as research samples with a total data observation of 226 data (balanced panel data) during the data collection period of 2020 - 2021.

Table 1. Operational Definition and Measurement of Variables

No	Variable	Operational definition	Variable Measurement
1	Fraud in financial reporting	a phenomenon that occurs intentionally to mislead stakeholders about the reality that exists in the organization, and this can damage user confidence in financial reports (Awang et al., 2016).	-4.84 + 0.920(DSRI) + 0.528(GMI) + 0.404(AQI) + 0.892(SGI) + 0.115(DEPI) - 0.172(SGAI) + 4.679(Accruals) - 0.327(LEVI). (Beneish, 1999)
2	Intellectual capital	a pure intangible asset for a company that leads to organizational growth in a competitive environment (Dabić et al., 2021; Salehi et al., 2023).	Intellectual Capital (INCAP) = HCE + SCE + RCE. Description: HCE = Human Capital Efficiency; SCE = Structural Capital Efficiency; RCE = Relational Capital Efficiency (Lotfi et al. 2022)
3	Human Capital	a combination of knowledge, skills, abilities, and other characteristics that enable	Human Capital (HCE) = HC / VA. Description: HC = Total employee

		individuals to improve job performance (Nyberg et al., 2018; Collins, 2021).	costs; VA = Value Added (Operating Income + Employee Cost + Depreciation + Amortization)
4	Structural Capital (SCE)	a key element of an organisation's Intellectual Capital (IC), which is associated with the company's structure and framework (Khalique et al., 2020)	SCE = SCE / VA Lotfi et al. (2022)
5	Relational Capital (RCE)	An organization's ability to form alliances with customers and outside entities; enabling the creation of additional value and giving the organization a competitive edge (Londoño & Espinosa, 2021).	RCE = OC / VA OC: organisational capital; VA: Value Added.
6	Return on Asset (ROA)	measure of a company's ability to generate earnings from its asset base and is linked to the overall value of its assets (Asni & Agustina, 2022).	Lotfi et al. (2022) as Operating Profit divided by Total assets
6	Efficiency	company's ability to use resources (input) allocated to achieve a higher level of output without incurring additional operating costs or if the company uses the lowest costs to produce the same level of output (Osagie, 2018).	Efficiency = Ratio of sales to fixed assets
8	Liquidity	the company's ability to pay off debts due within one year, which is related to company policies and in maintaining its business operations (Brigham & Houston, 2021).	Liquidity = Current assets / Current liabilities
9	Return on Equity	a metric to measure a company's capacity to produce after-tax earnings from shareholder funds; The ability of management can be assessed by evaluating its success in achieving the highest possible rate of return for shareholders.	Net Profit / Total Equity (Firdausya and Parasetya, 2020)

This study examines the effect of IC on financial reporting fraud in manufacturing companies. This study employs multiple regression analysis, utilizing a linear regression equation model defined by the following equation:

Model 1, to test H1

KLK = α + β1 INCAP + β2 ROA + β3 Efficiency + β4 Liquidity + β5 ROE + β6 Size of Committee Audit + ε

Model 2 to test H2

KLK = α + β1 HCE + β2 ROA + β3 Efficiency + β4 Liquidity + β5 ROE + β6 Size of Committee Audit + ε

Model 3 to test H3

KLK = α + β1 SCE + β2 ROA + β3 Efficiency + β4 Liquidity + β5 ROE + β6 Size of Committee Audit + ε

Model 4 to test H4

KLK = α + β1 RCE + β2 ROA + β3 Efficiency + β4 Liquidity + β5 ROE + β6 Size of Committee Audit + ε

Note: KLK = Fraudulent financial statement; α = Konstanta; β1, β2, β3, β4, β5, β6 = Coefficients; INCAP = Intellectual Capital Efficiency; HCE =Human Capital Efficiency; SCE = Structural Capital Efficiency; RCE = RelationalCapital Efficiency; ROA = Return on Asset; ROE= Return on Equity; ε= Standard Error

Result and Discussion

The calculation uses the Beneish model, which has an average value of -2.269. The M-score (KLK) value indicates that the average company in the study likely manipulated financial statements during 2020-2021 because the M-Score value is > -2.22 (Beneish, 1999).

The Human Capital variable (HCE) has an average of 0.538. This means that, on average, the company can contribute 53.8% to the added value in the funds invested in intellectual capital. These funds are related to employee costs, including salary and wage, employee welfare, remuneration, and pension costs. The mean value of the SCE is 0.461. It means that the average company in the sample contributes 46.1% of each operational cost invested in intellectual capital. The last independent variable in this study is relational capital (RCE). The results of the descriptive analysis show that the average value of the RCE variable is 0.055. This means that the average company in the sample contributes 5.5% of funds to the value added in the company's intellectual capital through funds invested in marketing and advertising costs.

Table 2 Descriptive Statistics

Variabel	Observasi	*Mean*	*Median*	*Max*	*Min*	Std. Dev.
KLK	226	-2,269	-2,293	-0,773	-3,489	0,566
INCAP	226	1,055	1,019	1,486	1,000	0,088
HCE	226	0,538	0,437	5,948	0,001	0,514
SCE	226	0,461	0,562	0,999	-4,948	0,514
RCE	226	0,055	0,019	0,486	4,510	0,088
ROA	226	0,040	0,034	0,363	-0,229	0,073
EFFICIENCY	226	3,527	2,446	23,01	0,159	3,578
LIQUIDITY	226	3,473	1,727	206,8	0,485	13,881
ROE	226	0,055	0,059	1,450	-1,666	0,218
SIZE_AUDIT	226	3,030	3,000	5,000	2,000	0,256

Table 3 Hypothesis Testing

Variable	*Model 1*	*Model 2*	*Model 3*	*Model 4*
INCAP	0,0027			
	-1,4429*			
HCE		0,8260		
		0,0190		
SCE			0,8260	
			-0,0190	
RCE				0,0027
				-1,4429*
ROA	0,0506	0,0393	0,0393	0,0506
	1,7145	1,8926	1,8926	1,7145
EFFICIENCY	0,2613	0,3679	0,3679	0,2613
	0,0132	0,0109	0,0109	1,7145
LIQUIDITY	0,4425	0,3828	0,3828	0,4425
	0,0020	0,0023	0,0023	0,0132
ROE	0,3988	0,2472	0,2472	0,3988
	-0,2452	-0,3431	-0,3431	-0,2452
SIZE_AUDIT	0,6672	0,2707	0,2707	0,6672
	0,0702	0,1815	0,1815	0,0702
Prob(F-statistic)	0,0078	0,2124	0,2124	0,0078
Adjusted R-squared	0,0505	0,0107	0,0107	0,0505

The ROA control variable has an average value of 0.040, indicating that the average company in the sample generates a profit of 4% of its total assets.

The first independent variable is intellectual capital (INCAP), which was tested using model scheme 1. This variable has a probability value of 0.0027, lower than α 0.05. It has a negative coefficient value of -1.4427, meaning that intellectual capital significantly negatively affects financial statement fraud. The second variable in this study is human capital (HCE). This variable has a probability value of 0.826, higher than α 0.05. The results of this analysis indicate that the human capital variable does not affect fraud in financial statements. Thus, it can be interpreted that the second hypothesis in this study is not supported. The third independent variable is structural capital (SCE). The measurement results show a probability value of 0.8260, greater than α 0.05. The measurement results mean that the structural capital variable does not affect the financial statement fraud variable. In other words, the third hypothesis in this study is not supported. The last independent variable is relational capital (RCE). The analysis results show a probability value of 0.0027, which is lower than α 0.05, and has a negative coefficient value of -1.4429, meaning that relational capital (RCE) significantly negatively affects financial statement fraud (KLK). This can be interpreted as financial statement fraud being influenced by RCE; when the RCE value is higher, the number of financial statement frauds in the company is smaller, and vice versa. Therefore, the fourth hypothesis proposed, namely that relational capital hurts fraud in financial statements, is supported.

Intellectual Capital and Fraudulent Financial Statement

The results of this study indicate that intellectual capital plays a role in reducing fraud in financial reports. The findings of this study support the conclusions drawn by Lotfi et al. (2022) study, which discovered that IC has a detrimental influence on instances of fraud in financial statements. A company's high intellectual capital signifies superior quality intangible assets that can boost productivity and lower the incidence of fraud in financial statements (Lotfi et al., 2022). The company's intellectual capital will offer numerous competitive benefits linked to corporate innovation, as stated by (Mubarik et al., 2016). The competitive advantages contained in the IC can create value creation and prevent opportunistic behavior that can lead to fraud in financial reports (Lotfi et al., 2022). Then, the results of this study also support the fraud triangle theory put forward by Cressey (1953) regarding the causes of fraud related to opportunity. Based on the fraud triangle theory, IC has a role in adding value-added services to prevent opportunistic behavior, provide opportunities for management to carry out profitable activities, and reduce the company's financial difficulties. The role of IC can also increase the credibility of the company because the competitive advantage generated affects the increase in profits, so fraud in financial statements can be suppressed.

Human Capital and Fraudulent Financial Statement

Fraud in financial statements is not influenced by human capital, so the second hypothesis in this study is not supported. The results of these tests are inconsistent with findings from research carried out by Jaya, (2021); Lotfi et al. (2022), which found a substantial negative relationship between human capital and fraud in financial reports. The findings of this research are not in line with the fraud triangle theory Cressey (1953), which states that human capital performance is not related to pressure factors in the company and, therefore, is not associated with fraud in financial reports. Research of Hutahayan (2020) indicates that human capital in Indonesian manufacturing firms has no bearing on innovation generation and corporate financial outcomes. Manufacturing companies in Indonesia are struggling to capitalize on their human resources. In Indonesia, HC primarily concentrates on the expenses associated with employee salaries rather than exploring ways to boost creativity. The main problem with human capital in Indonesia concerns effectively managing workforce competitiveness, something that has not been done to the best of its ability (Andriani, 2021). Most Indonesian manufacturing companies concentrate primarily on achieving ideal competencies in their work outcomes. Currently, employees' capacity to generate ideas, creativity, and innovation, which can help companies establish competitive advantages and prevent fraudulent financial reporting, remains relatively low (Hutahayan, 2020).

This fact is similar to the World Bank (2020), which shows that the human capital index in Indonesia is sixth out of eleven countries in the Southeast Asia region. This could be a factor that companies have not given much attention to, such as the number or factor of human capital in Indonesia itself. Human capital in Indonesia remains underutilized. It has not been able to create added value, so its influence on fraudulent reporting in Indonesia has not been significantly proven. In the fraud triangle theory, human capital plays a role in preventing the pressure faced by companies in committing fraudulent financial statements (Cressey, 1953). The relatively low human capital figures have been unable to encourage pressure factors in committing fraud due to the company's unstable financial stability (Tiffani & Marfuah, 2015). Human capital in a company is part of an intangible asset that can create value and competitive advantage through a strong internal strategy in the company's business processes (Hutahayan, 2020).

Structural Capital and Fraudulent Financial Statement

The results of the study show that the analysis results in the form of financial report fraud do not significantly affect the structural capital of manufacturing companies in Indonesia, so the third hypothesis in this study is not supported. The test results contradict those found by Lotfi et al. (2022), which demonstrated a substantial negative relationship between structural capital and financial report fraud. These findings are not in line with the fraud triangle theory of Cressey (1953) because structural capital performance is not related to opportunity factors in the company and, therefore, is not associated with fraud in financial reports. Most Indonesian manufacturing firms have failed to effectively leverage corporate governance and related structures in information systems, organizational culture, and management philosophies to generate additional value and enhance their intellectual capabilities. Consequently, their in-house ideas are not being fully utilized to improve business performance, leaving the company vulnerable to financial report fraud (Hutahayan, 2020).

Structural capital describes good governance management within the company to reduce the opportunity factor in committing fraud (Zheng et al., 2014). In this study, SC produced relatively low results because the focus of manufacturing companies in Indonesia is not only on operations, so pressure and opportunity to commit fraudulent financial statements can be prevented (Cressey, 1953). This is supported by research conducted by Azzahra (2018), which resulted in structural capital in Indonesia not being able to create a competitive advantage that can help the success and sustainability of the company; this is because SC in Indonesia is not optimal in management, so that it cannot create a competitive advantage and face market competition. Structural capital can prevent a company from perpetuating fraud due to the competitive advantages it confers, which in turn enhance the company's performance and counteract financial challenges (Hamdan, 2018). The research findings indicate that a significant negative relationship exists between relational capital and fraud in financial reports, thereby validating the final hypothesis of this investigation. This study's findings are consistent with those of Lotfi et al. (2022), indicating that relational capital hurts the occurrence of fraud in financial statements. According to the fraud triangle theory (Cressey, 1953), companies are less likely to engage in fraudulent financial reporting when they possess relational capital, as it can counteract the rationalization of those who view fraud as an acceptable option.

Relational Capital and Fraudulent Financial Statement

Inside a company, internal relationships also affect its connections with external parties in conducting collaborations or pursuing other interests that contribute to enhancing the quality of relationships, the company's business survival, and its development (Saputra & Pratomo, 2023). The concept of RC emphasizes a robust moral connection between the firm and outside entities, allowing it to mitigate the personal inclination of managers to engage in fraudulent activities (Lotfi et al., 2022). A high Return on Capital (RC) value will lead to company optimization, resulting in a decrease in fraud in financial reporting. Indonesian manufacturing firms are prioritizing the enhancement of the value of RC to foster connections with external entities in an attempt to boost sales and profitability for the company. RC also has a positive effect because it enables innovation that can enhance relationships between stakeholders and optimize the company's business model (Ganguly et al., 2020). Financial reporting fraud can, therefore, be kept under control. Research by Duan et al. (2023) found that intangible assets such as RC can be converted and leveraged to gain a competitive edge, thereby adding value and reducing the risk of financial reporting fraud.

Conclusions and Recommendations

This research aims to gather empirical evidence on the impact of intellectual capital, human capital, structural capital, and relational capital on financial reporting deception in manufacturing companies listed on the IDX from 2020 to 2021. The analysis conducted in the study suggests that Intellectual Capital (INCAP) has a detrimental impact on financial statement fraud. The presence of Human Capital (HCE) does not influence the occurrence of fraud in financial statements. Human capital can provide added value if its implementation encourages company performance improvement. However, the application of human capital in Indonesia is not optimal. The application is limited to ideal competencies, so employees' ability to generate ideas, foster creativity, and drive innovation that can create competitive advantages and prevent financial statement fraud remains relatively low. Structural Capital (SCE) does not affect financial statement fraud. Manufacturing companies in Indonesia have not been able to utilize structural capital optimally, so they have not been able to create competitive advantages that can help the company succeed and sustain itself in facing market competition. Structural capital can hinder the company's commitment to committing fraud because of the competitive advantage that improves the company's performance and can overcome financial difficulties. Relational Capital (RCE) hurts financial statement fraud.

This research suggests that companies with high intellectual capital values will gain a competitive advantage by preventing opportunistic behavior. In addition, the value of intellectual capital can encourage added value related to the company's continuity in the future, thereby reducing the risk of financial statement fraud. This is because relational capital in manufacturing companies in Indonesia can provide added value that can reduce the pressure on financial statement fraud. Furthermore, relational capital is an intangible asset that can be converted and used to create competitive advantages and increase performance, which can prevent financial statement fraud.

The research currently being conducted has several limitations. The limitations of this study are presented as follows. The final results of the sample data in this study are minimal because many companies in the population do not meet several predetermined criteria. In addition, the reporting period taken is a period where there is a global issue, namely COVID-19, which affects some of the company's financial data. The measurement of human capital and structural capital variables is limited to the fundamental components of each cost incurred by the company listed in the financial statements. This has not been able to represent these variables as a whole. Therefore, other performance disclosure components can be added, such as disclosure in narrative form (HR Competence, company vision, and mission, development system) and disclosure in graphic and image form (Number of HR, Achievement strategy), which can also affect the value added in each component of the HC and SC variables. Based on the limitations explained in this study and the addition of new ideas, the author provides suggestions that can be used as updates and references for similar studies in the future, aiming to improve the limitations of this study. Further research is recommended to extend the research period and separate research data for data in the year before the COVID-19 pandemic, during the COVID-19 pandemic, and after the COVID-19 pandemic. In addition, further research can include observations from various company sectors to yield more varied results. Further research can also add disclosures related to human capital, structural capital, relational capital, and intellectual capital as moderating variables in the study in order to optimally reflect all factors and components in the IC that can overcome financial reporting fraud. Further research can add external theory or stakeholder theory as a reference. This is based on the results of research that tends towards external factors in preventing financial reporting fraud.

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