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Detection Of Fraudulent Financial Reporting Using Fraud Score Model (Empirical Study On State-Owned And Sharia Banking Companies Listed On The IDX 2018-2022)

Deteksi Fraudulent Financial Reporting Dengan Menggunakan Fraud Score Model (Studi Empiris Pada Perusahaan Perbankan Bumn Dan Syariah Yang Terdaftar Di Bei Tahun 2018- 2022)

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ABSTRACT
The aim of this study is to detect financial statement fraud using fraud score model with hexagon theory of fraud in SOE and Shariah banking sector in 2018-2022. The f-score model represents the dependent variable, while the independent variables are represented by the hexagon theory of fraud, which are financial target, financial stability, external pressure, change in director, external auditor quality, change of auditor, total accrual to total assets, dualism of positions, ineffective monitoring, and cooperation with government. The subject of this study includes state and sharia banks listed on the Indonesia Stock Exchange in 2018-2022, the number of samples used is 38 samples. The statistical technique used in this study is panel data with multiple regression analysis method with SPSS software (Statistical Package for Social Sciences) 26. The results show financial targets, financial stability, external auditor quality, total accruals to total assets, and cooperation with government affect financial reporting fraud. The results of this study can be used by financial statement users as a reference to detect the possibility of financial statement fraud. These results can be a contribution for management and stakeholders to make policies to detect financial statement fraud as one way of anti-financial statement fraud strategy with fraud hexagon theory.
Keywords: *Financial Fraudulent Reporting, F-Score Model, Fraud Hexagon Theory, BUMN Bank, Sharia Bank.*

ABSTRAK
Penelitian ini bertujuan untuk mendeteksi kecurangan laporan keuangan menggunakan model fraud score dengan teori hexagon fraud pada sektor BUMN dan perbankan syariah pada tahun 2018-2022. Model f-score mewakili variabel dependen, sedangkan variabel independen diwakili oleh hexagon theory of fraud, yaitu target keuangan, stabilitas keuangan, tekanan eksternal, pergantian direksi, kualitas auditor eksternal, pergantian auditor, total akrual terhadap total aset, dualisme jabatan, pengawasan yang tidak efektif, dan kerja sama dengan pemerintah. Subjek penelitian ini meliputi bank umum dan bank syariah yang terdaftar di Bursa Efek Indonesia pada tahun 2018-2022, jumlah sampel yang digunakan sebanyak 38 sampel. Teknik statistik yang digunakan dalam penelitian ini adalah data panel dengan metode analisis regresi berganda dengan software SPSS (Statistical Package for Social Sciences) 26. Hasil penelitian menunjukkan target keuangan, stabilitas keuangan, kualitas auditor eksternal, total akrual terhadap total aset, dan kerjasama dengan pemerintah berpengaruh terhadap kecurangan pelaporan keuangan. Hasil penelitian ini dapat digunakan oleh para pengguna laporan keuangan sebagai acuan untuk mendeteksi kemungkinan terjadinya kecurangan laporan keuangan. Hasil penelitian ini dapat menjadi kontribusi bagi manajemen dan para pemangku kepentingan untuk membuat kebijakan dalam mendeteksi kecurangan laporan keuangan sebagai salah satu cara strategi anti kecurangan laporan keuangan dengan fraud hexagon theory.
Kata Kunci: Kecurangan Laporan Keuangan, Model F-Score, Fraud Hexagon Theory, Bank BUMN, Bank Syariah.

1. Introduction

in an effort to hold popularity, organizations often try and keep the overall overall performance and sustainability of the enterprise organisation's business organisation. This circumstance triggers and causes the business enterprise to make diverse efforts inside the shape of financial assertion fraud so that the monetary statements may be nicely provided. based on the results of the 2016 ACFE survey, financial statement fraud confirmed a figure of two percen, in 2019 it elevated to six percen. within the interim, the 2021 ACFE survey suggests that monetary statement fraud on a scale of nine percen motives losses as much as IDR 8,479,900,000. The survey indicates that financial announcement fraud continually will increase in the following 12 months. based totally at the ACFE survey, maximum of the fraud cases occurred inside the banking area with a whole of 351 cases (ACFE, 2022). some of the fraud cases that passed off inside the banking sector consist of the case of financial institution Bukopin in 2016, which revised its net income by means of IDR 1.08 trillion to IDR 183. 56 trillion (Rachman, 2018); the case of monetary organization BTN in 2018, which practiced window dressing via adjusting its financial statements within the shape of selling non-performing loans and supplying credit score to asset management corporations (PPAs) (Kompas, 2020).

Financial assertion fraud is detected through several theories which have been confirmed in diverse instances of fraud detection models, one of that's the fraud score model, which is calculate via a linear regression equation. According to Singleton et al., (2010) financial statement fraud can be detected by calculating financial ratios. Beneish, (1999) introduced a detection ratio known as Beneish M-Score. Then, Dechow et al., (2011) also introduced financial ratios by developing F-Score model as a tool to detect financial statement fraud. In this study, the F-Score model can used for detecting financial statement fraud, according to Hugo, (2019) the F-Score model known better than the Beneish M-Score.

There are also several theories to detecting financial fraud, and these theories continue to evolve. Previous fraud theory began with fraud triangle theory, by Donald R. Cressey in 1953 which evolved into the fraud diamond theory. Crowe Horwath (2012) then added an element ego to the theory to become a fraud pentagon theory Ego, Stimulus, Opportunity, Rationalization, and Capability. In Vousinas, (2018) the theory was changed by adding a new element called collusion or conspiracy to become a fraud hexagon theory consisting of six elements, there are Stimulus, Ego, Opportunity, Capability, Rationalization, and Collusion. This research uses the Hexagon Theory because it is still relevant. The results of different studies are still many variables that are not significant in different types of companies, so more research needs to be done. The following is a research gap for each theoretical hexagon factor.

timulus projected with financial targets, financial stability, and external pressure. There is previous research on financial targets by Andrew et al., (2022); Faradiza, (2019); Mardeliani et al., 2022; Mukaromah & Budiwitjaksono, (2021); Sari & Nugroho, (2020); Tinambunan & Januarti, (2022) financial targets has not affect financial statement fraud. The variable financial stability in the Mukaromah & Budiwitjaksono, (2021); Situngkir & Triyanto, (2020); Tinambunan & Januarti, (2022) is proven to have an effect, while in Faradiza, (2019); Sari & Nugroho, (2020) does no effect to financial statement fraud. External pressure in the research of Sari & Nugroho, (2020); Situngkir & Triyanto, (2020); Tinambunan & Januarti, (2022) is found no effect ro the detection of fraudulent financial statements.

Capability projected by change in director and external auditor quality is said to detecting fraud in financial statements. From Faradiza, (2019); Mardeliani et al., (2022) a director change has a positive impact. However, findings from Mukaromah & Budiwitjaksono, (2021); Situngkir & Triyanto, (2020); Tinambunan & Januarti, (2022) suggest that a director change does not affect to detection the financial statements. The language will be objective, formal, and value-neutral, with clear sentence structure. External audit quality is reported as

ineffective for detecting financial statements fraud according to the study by Mardeliani et al., (2022); Mukaromah & Budiwitjaksono, (2021).

Rationalisation is anticipated to occur following a change in auditor variables as stated in the research by Mardeliani et al., (2022). The studies conducted by Mukaromah & Budiwitjaksono, (2021); Situngkir & Triyanto, (2020) suggest that it is no effect to detection of financial statements fraud. Meanwhile, Faradiza, (2019)shows the ratio of total accruals to total assets is no significant impact on fraudulent financial. Arrogance projected in the dualism position variable, according to Mardeliani et al., (2022) affects the ability to detect fraudulent financial reporting.

Opportunity projected with ineffective monitoring which is mentioned in research Faradiza, (2019); Mukaromah & Budiwitjaksono, (2021); Tinambunan & Januarti, (2022) has a significant effect to detecting fraudulent financial reporting, while in Sari & Nugroho, (2020); Situngkir & Triyanto, (2020) has no effect. Collusion involving projections of cooperation with government projects has been found to positively impact for detection fraudulent financial reporting by Mardeliani et al., (2022). In contrast, the study conducted by Mukaromah & Budiwitjaksono, (2021) concludes that collusion does not have a significant effect.

Notably, this study utilizes fraud hexagon theory, which authorized by ten variables, setting it apart from previous research. The aim of this research is to investigate BUMN and Sharia banking industries, utilizing the f-score fraud detection model to measure financial statement fraud, with analysis conducted through SPSS version 26. All technical terminology will be explicitly defined upon its first use throughout this investigation. Careful consideration has been given to ensure clear, concise statements which are logically connected and presented in a value-neutral, objective manner. Furthermore, this study conforms to appropriate academic standards, utilizing consistent citation and formal language register. No biased or emotional language is utilized, nor is any overly complex terminology or flowery language. The author maintains an impartial, passive voice throughout, with sentences exhibiting grammatical correctness and precision in word choice.

This research seeks to offer empirical evidence impact from various factors on financial statement fraud detection. These factors include Stimulus (financial targets, financial stability, external pressure), Capability (changes in director and external auditor quality), Rationalization (changes in auditor and total accruals to total assets), Arrogance (dualistic positions), Opportunity (ineffective monitoring), Collusion (cooperation with government). It will analyze and evaluate these factors in detail. This research contributes to users from financial statements to be reference for the detection of potential financial statement fraud. The study's findings could aid management and stakeholders in creating policies for detecting fraudulent financial statements by utilizing the fraud hexagon theory.

2. Hypothesis Development

a. The Effect of Financial Targets on Fraudulen Financial Reporting

Financial target defined as achievement goals that have been set by the company Sasongko & Wijayantika, (2019). According to Statement of Auditing Standard (SAS) No. 9, financial targets may give some pressure on management or employees, hence leading to financial fraud reporting. Financial target closely tied to the company's business operation cycle, and management need to meet predetermined financial targets to reflect a good company performance.

Previous research by Andrew et al., (2022); Mardeliani et al., (2022); Mukaromah & Budiwitjaksono, (2021) has shown financial targets influence financial statement fraud. When company's financial target projected by ROA is high, there is a greater possibility of management manipulating company profits, leading to fraudulent occurrences. However, unlike the findings of Faradiza, (2019); Sari & Nugroho, (2020); Tinambunan & Januarti,

(2022) which suggest that financial targets projected through ROA not affect at indications of fraud.

H1: Financial targets has an affect to financial fraud

b. The Effect of Financial Stability to financial fraud

Financial stability refers to the overall financial status of a company and serves as a benchmark for its performance during a specific financial period. In cases where a company's financial situation is unstable, its management can be characterized as suboptimal due to inefficient management of its financial resources and assets. Statement of Auditing Standards (SAS) No. 99 states financial instability resulting from company operations, economic conditions, and industry factors can create pressure on management.

The research by Mukaromah & Budiwitjaksono, (2021); Situngkir & Triyanto, (2020) shows financial stability from company have an impact on financial fraud. The research findings are in line with Tinambunan & Januarti, (2022) assertion if financial stability has positive effect to indicate fraudulent financial reporting when the situations where both management and stakeholders prefer stable conditions. However, Faradiza, (2019); Sari & Nugroho, (2020) contradicts this and claiming if financial stability has no impact on financial fraudulent.

H2: Financial stability has an affects to financial fraud

c. The Effect of External Pressure to financial fraud

External pressure refers to situation in which management encounters the pressure to fulfil demands of third parties outside of the company Sasongko & Wijayantika, (2019). Skousen et al., (2009) noted that management frequently faces pressure in securing additional external financial resources to enhance their competitive edge.

Ratio of free cash flow represents external pressure as it pertains to capital derived from business activities and investments (Basuki and Yulia, 2016). (Septriani & Handayani, 2018); Bayagub et al., (2018) contend that external pressure may lead to fraudulent financial reporting. Sari & Nugroho, (2020); Situngkir & Triyanto, (2020); Tinambunan & Januarti, (2022) provide evidence the external pressure has negative impact to financial fraud.

H3: External Pressure has an affects to financial fraud

d. The Effect of Change in Directors to financial fraud

Capability is is defined some ability of an individual to do the fraud within a company. Such capacity enables perpetrators to easily exploit opportunities for fraudulent activities. According from Wolfe & Hermanson, (2004), some person's authority in company enhances their ability to commit fraud. These observations suggest that the positions of director, CEO and department head can be considered as contributing factors to fraudulent practices. The replacement of directors demonstrates the intentions of multiple stakeholders to take over the directorial role from the previous period.

Faradiza, (2019); Sasongko & Wijayantika, (2019) revealed that changes in directors can lead to financial fraud. This finding is reinforced by Mardeliani et al., (2022) research, indicating that director changes have the potential to affect indications of financial fraud. In contrast to Mukaromah & Budiwitjaksono, (2021); Situngkir & Triyanto, (2020); Tinambunan & Januarti, (2022) have stated if changes in directors result negative impact to financial fraud.

H4: Change in director has an affects to financial fraud

e. The Effect of External Auditor Quality to financial fraud

The choice about Public Accounting Firm can affect the occurrence of financial fraudulent. The company considers quality of its financial reporting can be enhanced through the quality of its external auditors. The size of an accounting firm is an indicator of some quality of a company's financial reporting. Lennox & Pittman, (2010) contend the external auditors at Big Four firm more proficient to detecting fraud than another public accounting firm. Big Four, which conducts audits is deemed more capable of producing financial reports of quality than

Big Four due to the latter's perceived ability to detect higher levels of fraudulent financial reporting.

Apriliana & Agustina, (2017; Nilzam, (2020) indicates that external audit quality affects financial statement fraud. However, Mardeliani et al., (2022); Mukaromah & Budiwitjaksono, (2021) claim that auditor quality does not have an impact on fraud detection.

H5: External auditor quality has an affects to financial fraud

f. The Effect of Change in Auditor to financial fraud

Rationalisation can be viewed as a justification for fraudulent conduct and the provision of instruction on how to carry out such conduct. Rationalisation can embolden fraudsters to produce misleading financial statements, as they feel their actions are correct and reasonable. Companies consider changing auditors as a means of erasing evidence of previous auditor findings, which can prompt companies to swap auditors to mask fraudulent activity. Therefore, the possibility financial statement fraud increases when a company changes auditors.

This finding has been supported by Agusputri & Sofie, (2019); Koharudin & Januarti, (2021). The studies reveal that auditor turnover can have an impact on financial statement fraud. However, Mardeliani et al., (2022); Mukaromah & Budiwitjaksono, (2021); Situngkir & Triyanto, (2020) argue that auditor turnover does not significantly impact the detection of fraudulent financial statements.

H6: Change in auditor has an affects to financial fraud

g. The Effect of Total Accrual To Total Assets to financial fraud

Total accruals describe all company activities and can inform management decision-making. The extent to which cash is the basis for reporting revenue can be estimated using TATA and it can indicate management rationalisation through the accrual principle thus affecting financial fraud. This happen because management's judgments and decisions are reflected in the firm's accrual value (Skousen et al., 2009).

From Situngkir & Triyanto, (2020) supports the hypothesis, ratio of TATA is a significant factor in occurrence to fraudulent financial statements. In contrast, Faradiza, (2019); Mukaromah & Budiwitjaksono, (2021) research indicate the ratio of total accruals to total assets has no significant impact in financial statement fraud.

H7: Total accrual to total assets has an affects to financial fraud

h. The Effect of Dualism Position to financial fraud

Agency problems may arise due to dualism of positions and differing interests. If the managing director holds more than one position, they may exhibit power dominance and prioritise personal interests. This trait can lead to conflicts of interest with shareholders who may feel that the director exerts excessive influence over the company (Siddiq et al., 2017). In Mardeliani et al., (2022) shareholders concentrate on the financial performance of the firm to acquire a significant return on their investment, whereas managing directors prioritise their individual interests. Agency problems may arise due to conflicts of interest, making it possible for manager to attempt financial statement fraud.

The statement above is corroborated by Mardeliani et al., (2022) research, which indicates that adopting a dualism position has notable and positive impact on manifestation of financial statement fraud.

H8: Dualism position has an affects to financial fraud

i. The Effect of Ineffective Monitoring to financial fraud

Opportunities and inadequate corporate oversight can result in fraudulent financial statements. The authority of board of commissioners to oversee company operation means that supervision is linked to their position. Yesiariani & Rahayu, (2017) assert that independent board members who are not affiliated with the company can enhance supervision, thereby reducing the risk of incorrect financial reporting.

Faradiza, (2019); Mukaromah & Budiwitjaksono, (2021); Tinambunan & Januarti, (2022) demonstrate that financial statement fraud results from inadequate supervision within the company. Conversely, Sari & Nugroho, (2020) study, as well as Situngkir & Triyanto, (2020) reveal that ineffective supervisory management has adverse effects on financial statement fraud.

H9: Ineffective of monitoring has an affects to financial fraud

j. The Effect of Cooperation With Government Projects to financial fraud

Collusion is an aggrement or contract between two or more individuals that works against the rights of another party (Vousinas, 2019). Collusion can take place between insiders of a company and external agents, including politicians or governmental entities. Companies benefit from collaborating with the government since it is easier for the government to provide assistance in times of financial difficulties. Such aid may enhance company performance and value through cooperation; nevertheless, this also incentivises companies to engage in fraudulent activities.

Sari & Nugroho, (2020) research outlines the impact of government project collaborations on financial statement fraud. Companies aim to collaborate with government projects as a means of participating in said projects and attaining substantial profits, thereby exhibiting impressive levels of performance. According to Mardeliani et al., (2022) collaborating with government projects produces a favourable and considerable outcome on misleading financial statements. Conversely, Mukaromah & Budiwitjaksono, (2021) study found that cooperation with government has no effect on financial statement fraud.

H10: Cooperation with government has an affects to financial fraud.

3. Research Methods

Population and Sample

In this study, the BUMN and Sharia banking listed on Indonesia Stock Exchange (IDX) in 2018-2022 are used as be population. Reasons for selection of the banking sector as the population in study is this sector was the largest sector with highest number of frauds (ACFE, 2022). The sample used in this study is detailed in table 1:

Tabel 1. Sample Selection Criteria

Sample Selection Criteria	Number of Companies
State-owned and Sharia banking companies listed on the IDX in 2018-2022.	8
The company publishes annual financial reports on the company website or IDX website during the 2018-2022 period.	8
The company publishes financial statements in rupiah (Rp)	8
The data used are financial statements end on December 31.	8
Total companies according to the criteria x 5 years of observation	40
Data outlier	2
Total sample used	38

The research sample is 47 companies, but from the numbers obtained, only 8 corporate entities meet the research criteria. Since the research period starts from 2018 to 2022, the total sample obtained is a maximum of 40, with outlier data up to 2 samples, so the final sample obtained is 38.

Operational Definition of Variables

Tabel 2. Operational Definition of Variables

Variable	Measurements	Formula
Fraudulent Financial Reporting	F-Score Dechow et al., 2011 dalam Mardaliani et al. (2022)	Accrual Quality + Financial Performance RSST Accrual = ((ΔWC + ΔNC0 + ΔFIN)) / (Average Total Assets)
		ΔWC = (Current Assets – Short Term Liabilities)
		ΔNCO = (Total Assets – Current Assets – Investment and Advances) – (Total Liabilities – Short Term Liabilities – Long Term Liabilities)
		ΔFIN = Total Investment – Total Liabilities
		ATS = (Beg Total Assets + End Total Assets) / 2
		Financial Performance = Change in Receivable + Change in Inventories + Change in Cash Sales + Change in Earnings
		CIR = Receivable / ATS
		CII = Inventory / ATS
		CICS = (ΔSales / $Sales^{(t)}$) – (ΔReceivable / $Receivable^{(t)}$)
		CIE = ($Earnings^{(t)}$ / $ATS^{(t)}$) – ($Earnings^{(t-1)}$ / $ATS^{(t-1)}$)
		The company is suspected of financial statement fraud if the model's fraud score is greater than 1.
Financial Target	Return On Assets (ROA) (Tinambunan & Januarti, 2022)	Net Income / Total Assets
Financial Stability	ACHANGE (Tinambunan & Januarti, 2022)	(Total $asset^{(t)}$ – Total $assets^{(t-1)}$) / Total $assets^{(t-1)}$
External Pressure	Leverage (LEV) (Tinambunan & Januarti, 2022)	Total liabilities / Total assets
Change in Director	DCHANGE (Tinambunan & Januarti, 2022)	Variable Dummy (0;1) code 1 if there is changed the director, but if there is no change the director, it will be marked with code 0
External Auditor Quality	BIG (Mardeliani et al., 2022)	Variable Dummy (0;1) If there use the public accounting firm from Big Four, it will be marked with code 1, but if there is no use the public accounting firm from Big Four, it will be marked with code 0
Change in Auditor	CPA (Mardeliani et al., 2022)	Variable Dummy (0;1) If there is a change in the intern auditor, it will be marked with code 1, but if there is no change in the intern auditor, it will be marked with code 0
Total Accrual to Total Assets	TATA (Situngkir & Triyanto, 2020)	Total Accrual / Total Assets

Dualism Possition	DUALISM (Mardeliani et al., 2022)	Variable Dummy (0;1) Code 1 if the director has multiple position and if director does not has dual position it code 0
Ineffective of Monitoring / Pengawasan Tidak Efektif	BDOUT (Tinambunan & Januarti, 2022)	Number of independent commissioners / Total number of commissioners
Cooperation with government project / Kerja sama dengan proyek pemerintah	GOV (Mukaromah & Budiwitjaksono, 2021)	Variable Dummy (0;1) Code 1 if the company has cooperation with government and code 0 if company does not has Cooperation with government

Analysis Method

This research using multiple linear regression models operations of SPSS ver 26. The model consists of components coefficient of: R^2 (determination test), F-test (simultaneous test), partial test (t-test). Multiple linear regression analysis good enough for evaluating the relationship between the dependent variable (fraud score model); independent variable which is a component from fraud hexagon theory. Before performing a linear analysis, it is necessary to perform a classical assumption test to prove the using data are normally distributed, that no multicollinearity and that no heteroskedasticity. According the research of (Mardeliani et al., 2022) the research model is formulated as follows:

$$F - SCORE = ß0 + ß1ROA + ß2ACHANGE + ß3LEV + ß4DCHANGE + ß5BIG + ß6CPA + ß7TATA + ßDUALISM + ß9BDOUT + ß10GOV + \varepsilon$$

Keterangan:			
f-score	= Fraudulent Financial Reporting	**CPA**	= Change in Auditor
ß	= Constanta	**TATA**	= Ratio of Total Accrual to Total Assets
ROA	= Return on Assets	**DUALISM**	= Ratio of Total Accrual to Total Assets
ACHANGE	= Ratio of Change in Total Assets	**BDOUT**	= Ratio of Independent Commissioners
LEV	= Ratio of Total Liabilities per Total Assets	**GOV**	= Cooperation with Government
DCHANGE	= Change in director	**ε**	= error
BIG	= External Auditor Quality		

4. Results and Discussion

Descriptive Statistics

Tabel 3. Descriptive Statistical Analysis Results

	N	Min	Max	Mean	Std. Deviation
X1_ROA	38	.00	9.78	2.6547	2.81671
X2_ACHANGE	38	1.49	201.24	21.4097	35.83374
X3_LEV	38	.20	88.97	51.1221	35.23997
X4_DCHANGE	38	0	1	.32	.471
X5_BIG	38	0	1	.92	.273
X6_CPA	38	0	1	.45	.504

X7_TATA	38	-22.60	35.75	2.9529	10.06521
X8_DUALISM	38	0	1	.08	.273
X9_BDOUT	38	33.33	75.00	58.0732	9.70097
X10_GOV	38	0	1	.71	.460
Y_FSCORE	38	-1.47	3.69	.7008	0.67175
Valid N (listwise)	38				

Source : SPPS 26 Outputs, 2023

That table provides an overview of the lowest, highest, average, and standard deviation of the sample at this research. The proxy measure for dependent variable is f-score, while the values of ROA, ACHANGE, LEV, BIG, CPA, TATA, DUALISM, BDOUT, and GOV are proxy measures of the independent variables. Table 3 shows that the variables ROA, ACHANGE, DCHANGE, CPA, TATA, DUALISM have standard dev value higher than average, which indicates that the data of these variables are heterogeneous. Other variables including LEV, BIG, BDOUT, GOV, and F-Score have a standard deviation value smaller than the average. Therefore, it can be said that the data of the variables are homogeneous.

The F-Score categorizes companies as having indicated fraud if the company has an F-Score value > 1, and companies with an F-Score value < 1 are categorized as not having indicated fraud. Table 3 shows that F-Score has average value of 0.70. It value shows the majority of companies tend to be categorized as not indicating fraudulent financial reporting because these a value more than 1 (Dechow et al., 2011); although some samples have an F-Score value close to 1. Of the 38 samples with an F-Score value > 1, only 2 samples or 5.2% are indicated to committed the financial statement fraud.

Normality Test

Tabel 4. One-Sample Kolmogorov-Smirnov Test

		Un. Residual
N		38
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.34673065
Most Extreme Differences	Absolute	.131
	Positive	.131
	Negative	-.071
Test Statistic		.131
Asymp. Sig. (2-tailed)		.099[c]

Source : SPSS 26 Output, 2023

According table the normality test using one-sample Kolmogorov test, it retrieved if Asymp Sig. (2-tailed) at 0.099. From this result indicates Asymp Sig. (2-tailed) over 0.05, it mean if the data was normally distribute.

Multicollinearity Test

Tabel 5. Multicollinearity Test Results

		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	X1_ROA	.400	2.497

X2_ACHANGE	.644	1.552
X3_LEV	.573	1.745
X4_DCHANGE	.828	1.207
X5_BIG	.604	1.656
X6_CPA	.724	1.381
X7_TATA	.509	1.964
X8_DUALISM	.840	1.191
X9_BDOUT	.535	1.871
X10_GOV	.572	1.748

Source: SPSS 26 Outputs, 2023

From the above test results, all independent variables of this study have tolerance value of higher than 0.10 and a VIF value of less than 10. Therefore, it concluded the independent variables used in this study have no multicollinearity and are reliable and objective (Ghozali, 2013).

Heteroskesdasticity Test

Tabel 6. Heteroskesdasticity Test Results useing Spearman's rho

			Unstandarized Residual
Spearman's rho	X1_ROA	Sig. (2-tailed)	0.868
	X2_ACHANGE	Sig. (2-tailed)	0.090
	X3_LEV	Sig. (2-tailed)	0.740
	X4_DCHANGE	Sig. (2-tailed)	0.689
	X5_BIG	Sig. (2-tailed)	0.937
	X6_CPA	Sig. (2-tailed)	0.829
	X7_TATA	Sig. (2-tailed)	0.095
	X8_DUALISM	Sig. (2-tailed)	0.811
	X9_BDOUT	Sig. (2-tailed)	0.887
	X10_GOV	Sig. (2-tailed)	0.580

Source : SPSS 26 Outputs , 2023

Results from heteroscedasticity test shown in table, significance value of each variable in this study more than 0.05 (Ghozali, 2013). Therefore, it concluded that the regression model do not retrieved symptoms of heteroscedasticity.

Multiple Linear Regression Test

Tabel 7. Multiple Linear Regression Test Results

Model		Hipotesis	B	t	Sig.	Decision
1	(Constant)		-.909	-1.353	.187	
	X1_ROA	+	.134	3.574	.001	H1 accepted
	X2_ACHANGE	+	-.011	-4.737	.000	H2 accepted
	X3_LEV	+	-.002	-.863	.396	H3 denied
	X4_DCHANGE	+	-.017	-.107	.915	H4 denied
	X5_BIG	+	1.017	3.236	.003	H5 accepted
	X6_CPA	+	-.169	-1.089	.286	H6 denied

X7_TATA	+	.048	5.135	.000	H7 accepted
X8_DUALISM	+	-.103	-.387	.702	H8 denied
X9_BDOUT	+	.005	.500	.621	H9 denied
X10_GOV	+	.477	2.485	.019	H10 accepted

Source : SPSS 26 Outputs, 2023

Based on the test results above, the regression equation is as follows:

$$\mathrm{F-SCORE} = (-0{,}909) + (0{,}134)\mathrm{ROA} + (-0{,}011)\mathrm{ACHANGE} + (-0{,}002)\mathrm{LEV} + (-0{,}017)\mathrm{DCHANGE} + (1{,}017)\mathrm{BIG} + (-0{,}169)\mathrm{CPA} + (0{,}048)\mathrm{TATA} + (-0{,}103)\mathrm{DUALISM} + (0{,}005)\mathrm{BDOUT} + (0{,}477)\mathrm{GOV} + \varepsilon$$

Determination Coefficient Test (R^2)

Tabel 8. Determination Coefficient Test

Model	R	R Square	Adjusted R Square
1	.856[a]	.734	.635

Source : SPSS 26 Output , 2023

Based on table 8, adjusted R^2 has a value of 0.635 or 63.5%. These results explain that financial statement fraud authorized F-score can explained by independent variable fraud hexagon theory by 63.5%. While the other 36.5% is influenced variables not included in this research model.

F-Test (Simultaneous Test)

Tabl 9. Simultaneous Test Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.248	10	1.225	7.434	.000[b]
	Residual	4.448	27	.165		
	Total	16.696	37			

Source : SPSS 26 Output, 2023

From the F-test results in table, we can conclude that the F-significance value is 0.000. Since the sig. F < 0.05 in accordance basis theory for decision, it concluded if the regression is fit or can be partially tested.

Partial Test / Individual Parameter Test (t-test)

Hypothesis testing is performed comparing the probability value on the significance level. Test decision made on results of sig. t probability value. If sig. t value < 0.05, there is significant effect on dependent variable, the hypothesis is accepted. And if sig. t > 0.05, the hypothesis is denied because there is no significant. The following a table of hypothesis testing results:

Tabel 10. T- test Results

Model		Hipotesis	B	t	Sig.	Decision
1	(Constant)		-.909	-1.353	.187	
	X1_ROA	+	.134	3.574	.001	H1 accepted
	X2_ACHANGE	+	-.011	-4.737	.000	H2 accepted
	X3_LEV	+	-.002	-.863	.396	H3 denied
	X4_DCHANGE	+	-.017	-.107	.915	H4 denied
	X5_BIG	+	1.017	3.236	.003	H5 accepted
	X6_CPA	+	-.169	-1.089	.286	H6 denied
	X7_TATA	+	.048	5.135	.000	H7 accepted
	X8_DUALISM	+	-.103	-.387	.702	H8 denied
	X9_BDOUT	+	.005	.500	.621	H9 denied
	X10_GOV	+	.477	2.485	.019	H10 accepted

Source : SPSS 26 Outputs, 2023

Based on table 10 above, the following analysis is concluded:

X1. The regression significance value on variable X1 ROA obtained of 0.001, which indicates that sig. t < 0.05. This indicate financial target has significant effect to financial fraud, hypothesis H1 accepted.

X2. The regression significance value of variable X2 ACHANGE (financial stability) obtained a value of 0.000. Results show financial stability has significant effect to financial fraud, hypothesis H2 accepted.

X3. The regression significance variable X3 LEV (external pressure) obtained a value of 0.396. This show external pressure has no significant to financial fraud, hypothesis H3 rejected.

X4. The regression significance variable X4 DCHANGE (change of director) obtained a value of 0.915. The results show change of director has no effect to financial fraud, hypothesis H4 rejected.

X5. Regression significance value of variable X5 BIG (external auditor quality) is 0.003, which shows that sig. t < 0.05. It indicate external auditor quality has significant effect to financial fraud, hypothesis H5 accepted.

X6. Regression significance value variable X6 CPA (change of auditor) obtained of 0.286. This show change auditor has no significant effect to financial fraud, hypothesis H6 rejected.

X7. Value of regression significance from variable X7 TATA (total accrual to total assets) obtained 0.000. It lower than 0,05 that mean total accrual to total assets has significant effect to financial fraud, hypothesis H7 accepted.

X8. The regression significance value of variable X8 DUALISM (dualism position) obtained 0.702, which indicates that sig. t > 0.05. Results indicate dualism position no significant effect to financial fraud, hypothesis H8 rejected.

X9. The regression significance value of variable X9 BDOUT (ineffective monitoring) obtained 0.621 which indicates that sig. t > 0.05. Results indicate ineffective monitoring no effect to financial fraud, hypothesis H9 rejected.

X10. Value of regression significance from variable X10 GOV (company with government) obtained 0.019, which indicates that sig. t < 0.05. It mean company with government has significant effect to financial fraud, hypothesis 10 accepted.

The effect of financial target on fraudulent financial reporting

First hypothesis of study talk financial targets affect financial statement fraud. To support the hypothesis, regression significance of financial target variable (ROA) was tested. Results show this variable significantly affects financial fraud, with positive regression coefficient of 0.134 and a sig. t level 0.001. Fraudulent financial statement has positively correlated with financial target value. When company return on assets (ROA) is high, management will manipulate company's earnings, which is a type of fraud. Higher company's target, more likely company to manipulate earnings. It is because financial targets can create pressure and will lead to financial statement fraud. The results support by Andrew et al., (2022); Mardeliani et al., (2022); Mukaromah & Budiwitjaksono, (2021) which shows if financial targets affect financial statement fraud. However, it is different Faradiza, (2019); Sari & Nugroho, (2020); Tinambunan & Januarti, (2022) that financial targets projected by ROA no effect on the evidence of financial statement fraud.

The effect of financial stability on fraudulent financial reporting

Second hypothesis take a look at financial stability has impact on financial declaration fraud. The variable is examined by way of checking out the significance of the regression coefficient of financial stability (ACHANGE). Based on the studies outcomes, the value monetary

stability regression coefficient is 0.011 and sig. t 0.000. The regression coefficient has a tendency to be poor with a sig. t. lower than 0.05. Result means that financial stability has extensive effect to financial assertion fraud, second one speculation is supported. This study shows that poor asset management can lead to financial statement fraud. Recent technological developments allow investors to remotely monitor the management of corporate assets. According to Tinambunan and Januarti (2022); financial stability increases the evidence of financial statement fraud because management and stakeholders prefer stable business conditions. If the company cannot manage its assets well, it may indicate an unstable financial situation, which may reduce public trust in the company. To cover this up, managers may engage in financial statement fraud to show that all is well. This research is consistent with the research of Mukaromah & Budiwitjaksono, (2021); Situngkir & Triyanto, (2020); Tinambunan & Januarti, (2022) which states that financial statement fraud is affected by the financial stability of the company. However, this is contrary to the findings of Faradiza, (2019); Sari & Nugroho, (2020)show financial stability no effect to financial statement fraud.

The effect of external pressure on fraudulent financial reporting

Third hypothesis of this observe states external pressure has effective impact on financial declaration fraud. For third variable, the check performed through checking out the significance of regression coefficient of external pressure (LEV). Primarily based on the studies outcomes, the regression coefficient of external strain has negative sign 0.002 and sig. t 0.396 > 0.05. Because of this external pressure is not large for fraudulent monetary reporting, so the third speculation isn't supported. It could concluded that the level of external pressure is not going to affect the risk of fraudulent financial reporting. Findings of study do not support the findings of Bayagub et al., (2018); Septriani & Handayani, (2018); Skousen et al., (2009) that external pressure can lead to fraudulent financial reporting. However, findings of this study support the research Sari & Nugroho, (2020); Situngkir & Triyanto, (2020); Tinambunan & Januarti, (2022) that external pressure can have a negative effect on financial statement fraud.

The effect of director turnover to fraudulent financial reporting

Fourth hypothesis of study is director turnover has an effect to fraudulent financial reporting. For this variable, regression significance of the variable change of director (DCHANGE) was tested. The results showed a regression of -0.017 with sig. t of 0.915, which is the value of sig. t > 0.05. It means change of directors has no effect on the occurrence of fraudulent financial statements, fourth hypothesis not supported. From results of this study, it concluded the larger or smaller value of the change of directors, no has effect detection for fraudulent financial statements. Results do not support Faradiza, (2019); Mardeliani et al., (2022); Sasongko & Wijayantika, (2019) who state the change of directors can affect the signs of financial fraud. However, the results of this study support the findings of Mukaromah & Budiwitjaksono, (2021); Situngkir & Triyanto, (2020); Tinambunan & Januarti, (2022) which state that changes in director has a negative effect on financial statement fraud.

The effect of external auditor quality on fraudulent financial reporting

The fifth research hypothesis states that external auditor quality will have advantageous impact on financial assertion fraud. The take a look at turned into conducted by using checking out the significance of the regression coefficient of external auditor quality (BIG). The consequences acquired a advantageous regression coefficient 1.017, sig. t 0.003 < 0.05, then the fifth speculation is supported. It is concluded that the better the value of the great of the external auditor, the more the possibility of influencing the practise of monetary statements. The company believes that quality of financial reporting can improved thanks to the quality of its external auditors. The size of an audit firm is measure of quality the company's financial

reporting. Public accounting firm Big Four external auditors are better at detecting fraud than other public accounting firms. Big Four can provide high quality financial statement audit results compared to other public accounting firms because Big Four has auditors who are experienced and professional in their work to audit financial statements. This research is consistent with Apriliana & Agustina, (2017); Nilzam, (2020) who find that external audit quality affects financial statement fraud. Meanwhile, these findings contradict the findings of Mardeliani et al., (2022); Mukaromah & Budiwitjaksono, (2021)that auditor quality no has effect on fraud detection.

The effect of auditor turnover to fraudulent financial reporting

The sixth speculation of this look at states that auditor turnover has impact on fraudulent monetary reporting. Take a look at is carried out the usage of the regression significance of the auditor turnover variable (CPA). Based totally on the research effects, the auditor turnover variable has regression coefficient -0.169 with sig. t 0.286 in which sig t. > 0.05. This means that auditor turnover has no enormous effect on financial statement fraud, 6th speculation is not supported. From those results, it concluded that higher or decrease fee of auditor turnover has no capability to affect the capability for financial statement fraud. These results contradict the findings of Wahyuni & Budi Witjaksono (2017); Agusputri & Sofie, (2019); Koharudin & Januarti, (2021) that auditor turnover affects financial statement fraud. However, results of study support research of Mardeliani et al., (2022); Mukaromah & Budiwitjaksono, (2021); Situngkir & Triyanto, (2020) which state change in auditor do not affect the detection of financial statement fraud.

The effect of total accruals to total assets on fraudulent financial reporting

Seventh hypothesis assumes that total accruals to total assets have effect on financial statement fraud. Based on research results, this hypothesis supported because regression coefficient value is 0.048 and sig t. 0.000 lower than 0.05, which means that total accruals to total assets have effect on the potential for financial statement fraud. This may occur because large total accruals, which represent management in decision making, illustrate that all the activities of the company have not gone well, so they can lead to potential financial statement fraud. The situation leads management to rationalize a decision to doing financial statement fraud. Management changes value of accruals company financial period to make it look better. This study support the findings from Situngkir & Triyanto, (2020) which state TATA is factor in the occurrence fraudulent financial statements. However, it contradicts with findings of Faradiza, (2019); Mukaromah & Budiwitjaksono, (2021) which state that total accruals to total assets have no significant to financial statement fraud.

The effect of dualism position on fraudulent financial reporting

Eighth hypothesis states the position dualism has effect on financial statement fraud. Study tests regression significance of DUALISM variable. The research results show regression coefficient value -0.103 and sig. t 0.702 > 0.05, which do not support research hypothesis. This means the dualism of the position of the chief executive officer cannot affect financial statement fraud. Results of study contradict of Mardeliani et al., (2022); Shiddiq et al., (2017) which states the dualism position has a positive and significant effect on the signs of financial statement fraud.

The effect of ineffective monitoring on fraudulent financial reporting

Ninth hypothesis of the ineffective monitoring variable in the study has affects to financial statement fraud. To proving hypothesis, regression of ineffective monitoring variable (BDOUT) is tested. Based on results, show regression coefficient is 0.005 and sig. t 0.621 > 0.05 proves that the research hypothesis not supported. This means the size of BDOUT value is not able to prove the fraud of financial statements. This study contradicts findings of Faradiza, (2019);

Mukaromah & Budiwitjaksono, (2021); Tinambunan & Januarti, (2022) who are able to prove that financial statement fraud caused by ineffective monitoring in the company. However, the results of the study are in line with Sari & Nugroho, (2020); Situngkir & Triyanto, (2020) who state if ineffective monitoring negatively effect to financial statement fraud.

The effect of cooperation with government on fraudulent financial reporting

For last hypothesis in this study states that cooperation with government projects has some effect on fraudulent financial statements. Results were obtained through the regression test of the coefficient of cooperation with government projects (GOV) variable. Based on the test, regression coefficient is 0.477 and sig. t is 0.019. The results show that the sig. t value <0.05, so the tenth variable is supported. This means that the size of the value of cooperation with government projects affects the financial statement fraud. Cooperation with the government on a project can provide companies with an opportunity to obtain additional capital and/or profits. If a project with the government has a very large value and a complicated contract allows the company to avoid losses, it can encourage fraudulent financial statements. Complex contracts may also lead to misunderstandings between the two parties, which of course has the potential to cause problems that need to be covered or resolved as soon as possible, as a result, fraudulent financial statements are an option to cover up these mistakes. The findings contradict with research of Mukaromah & Budiwitjaksono, (2021) which states that cooperation with government projects no effect on financial statement fraud. Meanwhile, study results are consistent with the researches of Mardeliani et al., (2022); Sari & Nugroho, (2020) which state that cooperation with government projects has a positive and significant effect on fraudulent financial reporting.

5. Conclusion

This have a look at goals to empirically prove the impact of fraud hexagon theory in detecting fraudulent economic reporting using fraud score model defined through ten variables. Primarily based on this description, it could concluded that the variables of financial targets, financial stability, external auditor quality, total accruals to total assets, and cooperation with government have affect on financial statement fraud. Whilst external pressure, change of director, change of auditor, dualism of position, and ineffectiveness of supervision don't have any effect on financial assertion fraud. thus, the constructed good judgment is in accordance with the outcomes of the studies and the data acquired.

The implications from findings of this study on the variables of financial targets, financial stability, external auditor quality and cooperation with the government are factors that have been proven to have some impact on financial statement fraud. It is hoped that the results of this study will help management to consider their role as responsible agents and be accountable for the protection of shareholders, especially in state-owned and Islamic banking companies. Investors can also use it as a way to provide information to make them more cautious when thinking about their investments. For creditors as a consideration when providing loans or credit to companies. Those who use banking services to save, borrow or finance should be more careful in their choices. Users of economic statements can use related variables accurately to decide whether or not the company has the capability for fraudulent economic statements if you want to make the right decision.

Based on the discussion and findings, the researcher recommends several things for further research. For future research, it is hoped to use a broader research object so that the results can be generalized to both companies listed on Indonesia Stock Exchange (IDX) companies not listed on the IDX. Future researchers also expected to add other variables from fraud hexagon, such as share ownership, capital turnover, type of company, and political relations.

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