INTERNATIONAL JOURNAL OF SOCIAL AND MANAGEMENT STUDIES (IJOSMAS)
Vol.3 No. 2 (2022) e-ISSN : 2775-0809

Detecting Fraudulent Financial Reporting Through Hexagon Fraud Model: Moderating Role of Income Tax Rate

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Abstract *— Researchers analyze to collect empirical evidence to test the effect of independent variables of the hexagon fraud model, namely stimulus (STM), capability (CPB), collusion (CLL), opportunity (OPP), rationalization (RZN), and ego (EGO), on the variable dependent, namely detection of fraudulent financial reporting (FFR), with the income tax rate as a moderating variable. One of the motivations of a company or person to commit FFR is related to tax motives. The research uses the hexagon fraud (Vousinas, 2019) and there are indicators related to taxes are book-tax differences (BTD) to measure financial targets in STM variable and income tax rate (ITR) to measure the role of moderating variable. The sample data of this research are 480 public companies in Indonesia engaged in manufacturing in 2015 to 2019. Research results reveal that STM, RZN, and EGO have a positive effect on FFR, CPB and OPP have a negative effect on FFR. ITR strengthens the effect of CPB on FFR, and ITR weakens the effect of EGO on FFR. The research findings support the hexagon theory of fraud. This research can explain the phenomenon of fraudulent financial reporting and can be beneficial to regulators, management, and various stakeholders in detecting FFR.*

Keywords — ***Indonesia, Fraudulent financial reporting, Hexagon fraud, Book tax differences, Characteristic commissioner, Institutional ownership, Ineffective monitoring, Total accrual, CEO duality.***

I. INTRODUCTION

The company commits fraudulent financial statements due to intentional negligence. Companies that engage in fraudulent practices present financial statements that are biased, incomplete, and do not follow the applicable accounting principles so that they can influence the decisions taken by stakeholders. Fraud is a deliberate act from one party to another to violate the law (manipulation or providing false reports) for personal or group interests that will harm other parties (ACFE Indonesia Chapter, 2019).

ACFE 2020 survey explained that manufacturing was among the top 5 (five) types of industries most disadvantaged by fraud. Fraud perpetrators were committed 31.8% by employees, 29.4% by employees' superiors, 23.7% by managers, 15.1% by other parties. The motivation of companies to practice fraudulent financial reporting is known to reduce tax payments by practicing tax evasion. This criminal practice often arises because of opportunity, intentional, or weak supervision within a company (ACFE, 2020). The Indonesian tax system, namely the self-assessment system, provides convenience for taxpayers but can be used by taxpayers to avoid tax. Slemrod, J. (2007) explains that tax evasion is a tax manipulation practice by taxpayers intentionally to reduce or avoid paying taxes owed by carrying out illegal financial practices.

Legal cases involving fraudulent financial statements involve some American companies (Worldcom, Global Crossing, Tyco, and Enron). Some cases of fraudulent financial reporting occurred in public companies in Indonesia, including Garuda Indonesia, Kimia Farma, Indofarma, and Hanson International (Sandria, F., 2021).

Detection of financial reporting practices will simultaneously increase taxpayer compliance and increase government revenue. Thus, detecting fraudulent financial reporting is the main issue of this study. How does the hexagon fraud model affect the detection of financial reporting fraud? This research will answer this question. The research data sample from data on the financial statements of public companies in Indonesia engaged in the manufacturing sector from 2015 to 2019. This study also presents a new model using the income tax rate variable as a moderating variable that can strengthen or weaken the effect of the hexagon fraud model on fraudulent financial reporting detection.

The fraud triangle model consists of the elements of pressure, opportunity, and rationalization is the most widely used model to explain the background of people committing fraud (Cressey, D. R., 1953). Furthermore, the fraud scale (pressure, opportunity, and personal integrity) is a tool to analyze the possibility of someone committing fraud (Albrecht et al., 2011). Furthermore, the triangle fraud model developed into a diamond fraud model (pressure, opportunity, rationalization, and capability). Vousinas (2019) explains that the fraud model was developed to fit current practice. Vousinas (2019) introduces the SCORE model which is composed of 5 (five) elements, namely: Stimulus, Capability, Opportunity, Rationalization, and Ego. Furthermore, Vousinas (2019) also developed the SCORE model into the SCCORE model which consists of 6 (six) elements, namely: Stimulus, Capability, Collusion, Opportunity, Rationalization, and Ego. The model is expected to detect fraudulent financial reporting that is growing and varied.

Previous studies (Sihombing & Rahardjo, 2014; Santoso, NT, 2018; Pamungkas et al., 2018; Ozcelik, H., 2020; Ojilong'Omukaga, K., 2020; Devi et al., 2021) used diamond fraud models or pentagon fraud model. This study uses the hexagon fraud model (Vousinas, 2019) and uses the measurement of fraud detection in financial reporting related to tax motives. Previous research (Marriott, L., & Sim, D., 2017; Gottsche et al., 2020) explains that financial crimes include tax violations and tax evasion. Furthermore, Sihombing & Rahardjo (2014), Santoso, N. T. (2018), Pamungkas et al. (2018), and Ozcelik, H. (2020) explain that the "opportunity" variable (the number of independent commissioners) affects fraudulent financial reporting. Meanwhile, Ojilong'Omukaga, K. (2020) and Devi et al. (2021) explains that the "opportunity" variable as measured by the number of independent commissioners in a company has a positive and significant influence on fraudulent financial reporting. This study uses indicators related to taxation, namely the difference in book taxes (stimulus variable) and income tax rates (moderating variable).

This research provides input for regulators in updating policies regarding the mechanism for early detection of fraudulent financial reporting. This research has implications for stakeholders, creating an early detection method related to financial reporting fraud and can be used by internal auditors and external auditors (public accounting firms, government auditors, and regulators).

The presentation in this study consists of 5 (five) parts. Section 2 deals with the review of the literature on fraudulent financial reporting. Section 3 in this study presents the research methodology used. Furthermore, section 4 will explain the results of the research and discussion. In section 5, the researcher presents the conclusions of this study.

II. LITERATURE REVIEW

A. Agency Theory

Agency theory is analogous to the imbalance between principals and agents caused by differences in interests. The principal asks the agent to do something according to his expectations, while the agent's motivation to do something aims to maximize his utility. This difference in interests causes the principal to supervise the agent that causes agency costs to arise in control management performance. The principal gives authority to the agent to carry out the principal's interests, and the agent tends to be more concerned with his interests than trying to provide added value to the company (Jensen, M.C., & Meckling, W.H., 1979). These differences in interests trigger fraudulent behavior and practices in financial reporting.

B. Signaling Theory

Signaling theory explains that information asymmetry will encourage companies to present financial information to stakeholders. Companies know more about company performance and prospects than external parties (Fenandar, G. I., & Raharja, S., 2012). Information asymmetry conditions can trigger fraudulent financial reporting. Companies must reduce information asymmetry to reflect companies that carry out good corporate governance.

C. Fraud Theory

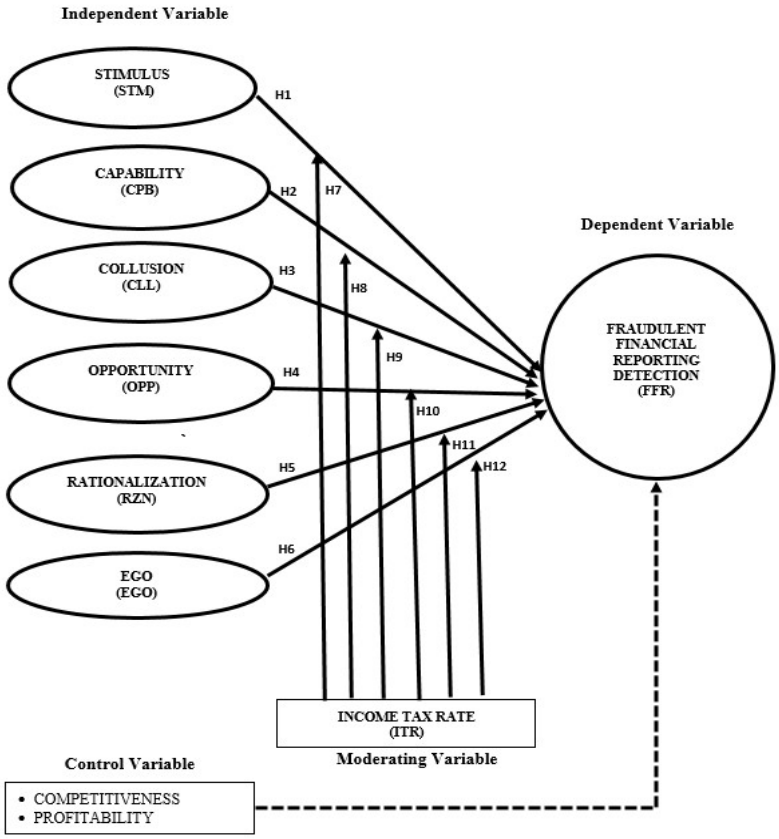
Fraud is someone's behavior intentionally and intended to harm the interests of the company, society, and the state, for the realization of personal interests. The presentation of false financial information is one of the fraudulent acts in financial reporting, for example, the presentation of material things that are wrong and done intentionally that harms other parties (Albrecht et al., 2011).

The triangle theory explains that someone commits fraud because of pressure, opportunity, and rationalization motives (Cressey, D.R., 1953). Furthermore, Wolfe and Hermanson (2004) developed the triangle theory into a diamond model of fraud because of a person's motives for committing fraud, namely pressure, opportunity, rationalization, and ability motives. Then Vousinasi (2019) developed a fraud model into the SCORE & SCCORE model following the development of increasingly dynamic fraud practices.

D. Conceptual Framework

Figure 1 illustrates the relationship between variables in this study, namely the influence of independent and control variables on the dependent variable moderated by the moderating variable. The conceptual framework explains how the elements in the fraud hexagon model affect the detection of fraudulent financial reporting and how income tax rates affect the relationship between the fraud hexagon model and fraudulent financial reporting.

Figure 1. Conceptual Framework



The hexagon fraud (SCCORE model) in the picture above explains the effect of 6 (six) variables, namely: STM, CPB, CLL, OPP, RZN, and EGO, on FFR detection, there is also a moderating variable (ITR) that affects the model relationship hexagon fraud against FFR. In this research, there are 2 (two) control variables were used, namely competitiveness as proxied by the size of the corporation (SZC) and profitability as measured by return on assets (ROA).

E. Hypothesis Development

Fraudulent financial reporting is an act of intentional misstatement, omitting an amount, or making financial statement disclosures to deceive financial statement users. Fraudulent financial reporting practices are carried out through reporting assets, income, liabilities, or expenses that do not match the actual transactions. Fraudulent financial reporting is perpetrated by anyone at any level and by anyone that fulfills SCCORE models (Stimulus, Capability, Collusion, Opportunity, Rationalization, and Ego).

Differences in accounting profit and tax profit because of differences in accounting standards and tax regulations (Beaver, W. H., 2002). The difference results in the same transaction recorded at different values due to tax planning. The low level of taxpayer compliance is a big problem in Indonesia. Many companies carry out tax avoidance activities indicated by the difference in the accounting profit with the fiscal profit or called Book Tax Difference (BTD). Some companies never paid taxes because they recorded a loss in the fiscal, while the company recorded an accounting profit. The company does tax planning to avoid paying taxes so that the net profit received by the company is not taxed. It will provide a stimulus or pressure for the

company to encourage someone or company management to try to commit fraudulent financial reporting. Thus, the researcher formulates the research hypothesis below.
H1: The stimulus has a positive influence on the detection of fraudulent financial reporting.

Adams & Ferreira (2009) explained that the presence of women in the composition of the board of commissioners encourages the effectiveness of the supervisory performance of the board of commissioners, namely by carrying out more intensive supervision of the actions of managers. A female board of directors has the same effect as an independent director. In terms of sociological behavior, gender can affect a person's compliance. Jackson and Miliron (1986) in Gunawan et al. (2018) found that gender can affect compliance which indicates that women are more obedient than men. Previous research (Khaoula, A., & Ali, ZM, 2012; Zemzem, A., & Ftouhi, K., 2013) proved that the presence of women on the composition of the board of commissioners in Tunisian companies can reduce fraudulent financial reporting practices. While the research conducted by Khaoula & Ali (2012) with research locations in America and Gunawan et al. (2018) with research locations in Indonesia proves that there is no effect between gender diversity and corporate fraud. Based on this explanation, the researcher formulates the research hypothesis below.
H2: The capability has a negative influence on the detection of fraudulent financial reporting.

Collusion is a dishonest attitude and act between two or more people by making certain agreements or agreements. Collusion can be carried out between employees within the company, individual groups in several companies, as well as between companies simultaneously (Vousinas, 2017). The special relationship between company officials and the concentration of company share ownership is a collusive practice in a company (Shleifer, A., & Vishny, R. W., 1994). Based on this explanation, the researcher formulates the research hypothesis below.
H3: The collusion has a positive influence on the detection of fraudulent financial reporting.

Previous research (Gunarsih, T., & Hartadi, B., 2002) explained that the board of commissioners is very influential and has a decisive role in overseeing the performance of top managers. Affiliated commissioners (inside directors) are commissioners who have business relationships, family relationships with controlling shareholders, and relationships with the company itself (with directors and commissioners). The existence of this relationship results in reduced independence as a supervisory board, besides that affiliated commissioners, can hold concurrent positions when there is a vacancy in the director's board. This also causes commissioners to have no independence as a supervisory board whose duties and functions are to oversee the performance of the director's board itself. The existence of independent commissioners contributes to more effective oversight. Thus, the existence of independent commissioners affects the effectiveness of supervision within the company. The lower the ratio of independent commissioners to the total number of commissioners, the higher the possibility of fraudulent financial reporting practices in a company. Based on this explanation, the researcher formulates the research hypothesis below.
H4: The opportunity has a negative influence on the detection of fraudulent financial reporting.

Rationalization is a justification used by fraud perpetrators for their fraudulent practices so that their fraudulent actions are not known or accepted or not considered wrong. Fraud perpetrators rationalize by conducting a subjective assessment of the company's accrual value reporting in the financial statements (Skousen et al., 2007). The accrual principle is the basic agreement in financial statements to be more rational and fair. However, the fraud perpetrators used the accrual principle to change the resulting profit reporting figures. Managers implement the accrual principle by modifying financial statements. Every management action is the trust given by the principal so that accrual decisions are often considered rational. The total value of accruals can indicate a company committing fraudulent financial reporting. The total accrual ratio is used as a proxy to explain the rationalization of the implementation of the accrual principle by management so that the company's performance will look good (Skousen et al., 2007). The greater the value of the total accrual ratio of a company, the greater the possibility of fraudulent financial reporting. Based on this explanation, the researcher formulates the following hypothesis.
H5: The rationalization has a positive influence on the detection of fraudulent financial reporting.

Several company CEOs have concurrent positions as commissioners. This phenomenon is CEO duality. Agency theory explains that CEO Duality will reduce oversight and create conflicts of interest. However, stewardship theory states that CEO Duality will strengthen a leadership structure that accelerates and optimizes managerial decision-making (Finkelstein, S., & D'aveni, R. A., 1994). Some corruption and financial fraud cases (such as Tyco International, Enron, Adelphia Communications, Quest Communications, Xerox, Royal Ahold, and Health South) involved evidence that the CEO had multiple

positions (Kholeif, A., 2008). However, the separation of CEO and commissioner positions in a company cannot increase the supervisory function if they have a family relationship. Separation of CEO and Commissioner having family relationships classified as CEO Duality (Lam, TY, & Lee, SK, 2008). Many companies in Indonesia still use the family system in the positions of CEO and Commissioner. Based on this explanation, the researcher developed the research hypothesis below.

H6: The ego has a positive influence on the detection of fraudulent financial reporting.

Article 17 of the Income Tax Law explains that the income tax rate for corporate taxpayers and domestic permanent establishments is 25% (twenty-five percent) which comes into effect since the 2010 fiscal year. Furthermore, Article 17 paragraph (2b) stipulates that a public company in Indonesia that trades its shares at least 40% (forty percent) of the total shares that have been paid up by shareholders and fulfills other requirements, can take advantage of a 5% (five percent) tariff lower than the general tariff by using a rate of 20% (twenty percent).

Provisions regarding income tax rates are used to calculate the tax payable while still prioritizing fair tax law functions, benefits, and legal certainty. Permatasari, I., & Laksito, H. (2013) stated that tax rates have a positive effect on tax avoidance. Slemrod, J. (2007) explains that tax evasion is an act of taxpayers to avoid or reduce the amount of tax owed by using illegal financial engineering techniques. Accounting fraud is carried out with earnings management so that real activities and future performance can be manipulated (Sandmo, A., 2005).

Public companies in Indonesia can obtain lower income tax rates (less than 25%) if they meet the requirements as stipulated in article 17 paragraph (2b) of the Income Tax Law. High-income tax rates will lead to higher and more aggressive tax avoidance practices. Income tax rates applicable in a country will moderate the practice of fraudulent financial reporting. Thus, public companies that take advantage of lower income tax rates than the general rate will affect fraudulent financial reporting. Based on this explanation, the researcher formulates the research hypothesis below.

H7: The income tax rates weaken influence of the stimulus on the detection of fraudulent financial reporting.
H8: The income tax rates strengthen influence of the capability on the detection of fraudulent financial reporting.
H9: The income tax rates weaken influence of the collusion on the detection of fraudulent financial reporting.
H10: The income tax rates strengthen influence of the opportunity on the detection of fraudulent financial reporting.
H11: The income tax rates weaken influence of the rationalization on the detection of fraudulent financial reporting.
H12: The income tax rates weaken influence of the ego on the detection of fraudulent financial reporting.

III.METHOD

A. Research Design

In this study, researchers used quantitative research methods. Researchers collect figures sourced from the financial statements of public companies in the manufacturing sector from 2015 to 2019. Next, researchers will analyze and interpret data from research results. The unit of analysis in this research is a public manufacturing company. Researchers collected data for 5 (five) years from 2015 to 2019 with a total sample data of 480 research data obtained from 96 manufacturing companies. Then, the researcher performed multiple regression analysis on the independent variables (STM, CPB, CLL, OPP, RZN, EGO), the moderating variable (ITR), and the dependent variable (FFR).

B. Operational Definition and Measurements of Variables

1) Detection of Fraudulent Financial Reporting (FFR)

FFR is the dependent variable in this study. Fraud is a tool used by someone to take advantage of another person in a way that is not following the provisions (Albrecht et al., 2011). Detection of fraudulent financial reporting uses a fraud score model (Dechow et al., 1995) or the so-called F-Score model. The F-Score model is the sum of accrual quality and financial performance (Skousen et al., 2009), with the formula below.

F-Score = Accrual Quality + Financial Performance

Companies that have low risk (no indication of fraud) have an F-Score <1. Meanwhile, companies that commit fraud have an F-Score > 1 (above normal) and an F-Score value > 2.45 (high risk).

Furthermore, in measuring accrual quality, the RSST Accrual proxy is used with the following formula:

$$\text{RSST Accrual} = \frac{\Delta \text{ WC} + \Delta \text{ NCO} + \Delta \text{ FIN}}{\text{ATS}}$$

Description:
Working Capital (WC) = Current Asstes – Current Liability
Non Current Operational Accrual (NCO) = (Total Assets – Currents Assets – Investment and Advances) – (Total Liabilities – Current Liabilities – Long Term Debt)
Financial Accrual (FIN) = Total Investment – Total Liabilities
Average Total Assets (ATS) = (Beginning Total Assets + End Total Asstes) : 2

Measurement of financial performance is provided by the sum of changes in receivables, inventories, cash sales, and earnings before interest and taxes (EBIT), with the calculation formula below.
Financial Performance = change in receivables+change in inventories+change in cash sales+change in earnings
Desription:
Change in receivables = Δ receivables / average total assets
Change in inventories = Δ inventories / average total assets
Change in cash sales = (Δ sales : Δ $\text{sales}_{(t)}$) – (Δ receivables / $\text{receivables}_{(t)}$)
Change in earnings = ($\text{earning}_{(t)}$ / average total $\text{assets}_{(t)}$) - ($\text{earning}_{(t-1)}$ / average total $\text{assets}_{(t-1)}$)

2) Stimulus/Pressure (STM)

Stimulus is pressure to commit fraudulent practices that can be financial and non-financial. The variable "stimulus" uses the financial target indicator (Vousinas, 2019). The difference between accounting profit and tax profit results in the same transaction recorded with different values due to tax evasion (Beaver, W. H., 2002). The proxy used to determine financial targets in this research is Book Tax Differences Book (BTD). Calculation of BTD by the following formula (Hanlon, M., & Heitzman, S., 2010):

BTD = (accounting profit−tax profit) / total assets

3) Capability (CPB)

Capability is a person's behavior and abilities that contribute to fraudulent practices after the influence of elements of pressure, opportunity, and rationalization (Vousinas, 2019). In this research, the variable of ability to use proxies is in the form of commissioners' characteristics. Adams and Ferreira (2009) prove that the presence of women in the composition of the board of commissioners will increase control by carrying out more intensive supervision of manager decisions. The characteristics of the commissioners are calculated by the ratio of female commissioners to total commissioners (COMW), with the formula below.

COMW = Female commissioners / Total commissioners

4) Collusion (CLL)

A collusion is an evil act carried out by two or more people to commit fraud against the rights of another party based on an agreement (Vousinas, 2019). In this study, the variable "collusion" is measured by a dummy variable on political connections (Faccio, 2006), coded "1" if there is a political relationship, and coded "0" if not.

5) Opportunity (OPP)

Vousinas (2019) explains that opportunity is a condition that encourages someone to commit fraud. Fraud perpetrators believe that their actions will not cause problems. The measurement of the opportunity variable uses the effectiveness of supervision within the company indicated by the ratio of external board members (BDOUT). The calculation of BDOUT is the number of independent commissioners to the total number of commissioners in a company (Skousen et al., 2009), with the formula below.

$$\text{BDOUT} = \frac{\text{Independent commissioners}}{\text{Total commissioners}}$$

6) Rationalization (RZN)

Rationalization has to do with justifying fraud (Vousinas, 2019). In this research, the rationalization variable used the company's total accrual indicator (TACC). Rationalization causes perpetrators of financial statement fraud to seek justification for their actions. The company's total accruals are subjective assessments and decisions. Managers perform financial engineering using the accrual basis to window dressing financial

statements and direct management decision-making. The calculation formula for the company's total accruals is as follows:

$$TACC = \frac{\text{Total Accrual}}{\text{Total assets}}$$

7) Ego (EGO)

Ego is a personality that helps us face reality with the help of mediation from the id, superego, and the environment (Vousinas, 2019). In this study, the variable "Ego" is proxied by the CEO Duality indicator or several CEO positions. CEO Duality is measured using a dummy variable regarding CEOs who have multiple positions, which is given a score of "1" if the CEO doubles as a commissioner or the CEO has a family relationship with the commissioner (two different individuals) and is given a score of "0" for the opposite (Finkelstein & D' Aveni, 1994; Yan Lam & Kam Lee, 2004). 2008).

8) Income Tax Rates (ITR)

The researcher uses the income tax rate as a moderating variable. Article 17 of the Income Tax Law stated that the income tax rate is 25% applies from the 2010 Fiscal Year to the 2019 fiscal Year. Public companies in Indonesia can utilize the income tax rate lower than the general rate (20%) if the total paid-up shares have been traded at least 40% on the Indonesian stock exchange. The imposition of lower income tax rates will affect tax avoidance behavior (Allingham, M. G., & Sandmo, A., 1972). In this study, public companies that take advantage of income tax rates lower than 25% get a score "1" and if companies do not take advantage of lower income tax rates are given a score "0".

9) Competitiveness dan Profitability

The control variables in this study are competitiveness and profitability. Size of a corporation can make a corporation classification, such as large and small companies. Several approaches to measuring the size of a corporation are calculated by total assets, the market value of the stock, average sales, and total sales (Suwito, E., & Herawati, A., 2005). In this research, competitiveness is measured by company size based on total assets, with the formula:

$$\text{Size of Corporation (SZC)} = \text{Ln Total Assets}$$

The previous study (Dang et al., 2018) has used the size of a corporation as a measurement in the research.

Profitability describes the ability of the company's financial performance to generate profits. In this study, the proxy used in measuring profitability is ROA (return on assets), namely the ability of a company to generate profits by utilizing its assets. The ROA formula is shown below.

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

This measurement is in line with previous research (Pamungkas et al., 2018; Ozcelik, H., 2020; Devi et al., 2021; and Fitri et al., 2019).

***C.* Data Collection**

Secondary data collection comes from the financial statements of public companies engaged in manufacturing from 2015 to 2019. Empirical statistical testing uses quantitative data on each research variable to explain the effect of FFR (the dependent variable). STM, CPB, CLL, OPP, RZN, and EGO (independent variables), and using moderating variables (ITR) and control variables (SZC and PRF).

***D.* Analysis Data**

Hypothesis testing will answer the research question. The data processing tools in this study used Microsoft Excel and Eviews 10 software. This study uses panel data and multiple linear regression methods by applying the classical assumption test to see the tendency of companies to commit fraudulent financial reporting. Hypothesis testing aims to obtain reliable data analysis results to support the research hypothesis. Based on the operational definition of variables and variable measurement, the equation model in this study is explained below.

$$FNF = \beta_0 + \beta_1 STM + \beta_2 CPB + \beta_3 CLL + \beta_4 OPP + \beta_5 RZN + \beta_6 EGO + \beta_7 STM*ITR + \beta_8 CPB*ITR + \beta_9 CLL*ITR + \beta_{10} OPP*ITR + \beta_{11} RZN*ITR + \beta_{12} EGO*ITR + \beta_{13} SZC + \beta_{14} PRF + \varepsilon$$

IV. RESULT AND DISCUSSION

A. Result

The data in the descriptive statistical table below presents the patterns, directions, and descriptive statistical analysis for all research variables.

Tabel 1. Descriptive Statistics

Description	Mean	Median	Maximum	Minimum	Standard Deviation
FFR	0.411	0.313	1.539	-1.083	0.472
STM	0.078	0.073	0.227	-0.015	0.050
CPB	0.119	0.000	0.750	0.000	0.171
CLL	0.829	0.880	0.999	0.455	0.159
OPP	0.630	0.667	0.667	0.500	0.060
RZN	0.046	0.032	0.316	0,000	0.049
EGO	0.304	0.000	1.000	0.000	0.461
ITR	0.575	1.000	1.000	0.000	0.495
SZC	24.192	26.802	29.178	13.390	4.733
PRF	0.089	0.100	0.294	-0.067	0.059

Source: Processed results of Eviews 10.
(FFR: Financial Fraud; STM: Stimulus; CPB: Capability; CLL: Collusion; OPP: Opportunity; RZN: Rationalization; EGO: Ego; ITR: Income Tax Rates; SZC: Size of Corpooration, and PRF: Profitability).

The variables STM, CLL, OPP, ITR, SZC, and PRF have good data quality because the average value of these variables is greater than the standard deviation value or has a small standard error.

Based on the Chow and Hausman test were found that the best model in this study was the fixed-effect model because the probability value of the Chow test was less than alpha (0.00 < 0.05), and the Hausman test probability value was less than alpha (0.01 < 0, 05).

The multicollinearity test is presented in table 2, no relationship between independent variables, or there is no multicollinearity between independent variables because the correlation value does not exceed 0.90 between independent variables (Ghozali, I., & Ratmono, D., 2013).

Table 2. Correlation Test

Description	STM	CPB	CLL	OPP	RZN	EGO	ITR	SZC	PRF
STM	1.000								
CPB	-0.227	1.000							
CLL	0.141	-0.137	1.000						
OPP	-0.088	-0.069	-0.051	1.000					
RZN	0.571	-0.118	-0.002	0.156	1.000				
EGO	0.519	-0.191	0.017	0.034	0.416	1.000			
ITR	0.009	-0.133	-0.095	-0.017	0.014	0.083	1.000		
SZC	-0.048	0.102	-0.269	-0.023	0.122	-0.003	-0.170	1.000	
PRF	0.573	-0.179	0.142	-0.224	0.283	0.558	0.060	-0.175	1.000

Based on the data in table 2 above can be shown that the coefficient of determination or the value of Adjusted R2 is 79.11%. It means that the fraud hexagon model (STM, CPB, CLL, OPP, RZN, dan EGO) can explain the dependent variable (FFR). Other variables used in this study have an effect of 20.89%. This study uses moderated regression analysis (MRA) because this study uses a moderating variable so that the panel data regression equation for the moderator variable uses the MRA equation.

Table 3. Moderated Regression Analysis (MRA) Test

Variable	Hypoteses	Coefficient	Prob (One-Tailed)	Results
C		-0.376	0.604	
STM	H1	2.021	0.018	Accepted
CPB	H2	-0.521	0.006	Accepted

CLL	H3	0.934	0.069	Reject
OPP	H4	-2.021	0.011	Accepted
RZN	H5	1.206	0.019	Accepted
EGO	H6	0.444	0.000	Accepted
STM*ITR	H7	1.538	0.111	Reject
CPB*ITR	H8	0.691	0.009	Accepted
CLL*ITR	H9	-0.368	0.290	Reject
OPP*ITR	H10	0.680	0.227	Reject
RZN*ITR	H11	-0.005	0.498	Reject
EGO*ITR	H12	-0.310	0.001	Accepted
SZC		0.039	0.000	Accepted
PRF		-0.755	0.194	Reject

Notes: *Significant p-value<0.05, Source: Processed results of Eviews 10,
(FFR: Financial Fraud; STM: Stimulus; CPB: Capability; CLL: Collusion; OPP: Opportunity; RZN: Rationalization; EGO: Ego; ITR: Income Tax Rates; SZC: Size of Corpooration, and PRF: Profitability).

B. Discussion

Based on the empirical results presented in table 3, several hypotheses have a significant effect because they have a p-value <0.05, while the others have no significance (p-value> 0.05). The results of testing the first hypothesis (H1) explain that the stimulus has a significant positive effect on fraudulent financial reporting detection because the p-value of the book-tax difference ratio is smaller than alpha (0.018 <0.05) with a coefficient value of 2.021. Thus, the first hypothesis (H1) is accepted. The results of this study support the previous research (Beaver, W. H., 2002) that is differences in accounting profit and tax profit occur due to different regulations: accounting standards and tax regulations. Some companies were founded not to pay taxes because they recorded fiscal losses while commercially reported profits.

The second hypothesis (H2) analyzes the effect of capability on fraudulent financial reporting detection. Based on the results of the H2 test was shown that the coefficient value is -0.521 and the p-value is 0.006 (<0.05). Thus, capability has a significant negative effect on fraudulent financial reporting. The second hypothesis (H2) is accepted. The results of this study support previous research (Adams, RB, & Ferreira, D., 2009) that the presence of women on the board of commissioners will affect the effectiveness of more intensive supervision.

The third hypothesis (H3) explains the effect of collusion on fraudulent financial reporting detection. The results of the H3 test showed a coefficient of 0.934 and a p-value of 0.069 (>0.05). Thus, collusion does not affect fraudulent financial reporting detection (H3 is not accepted). The research support previous research (Sabrina et al., 2020) but reject other studies (Matangkin et al., 2018).

The fourth hypothesis (H4) analyzes the effect of opportunity on fraudulent financial reporting detection. The results of the H4 test show the opportunity coefficient value of -2.021 with a p-value of 0.011 (<0.05). Thus, the opportunity has a significant and negative effect on fraudulent financial reporting detection. H4 is accepted. Managers will commit fraudulent financial reporting if there are weaknesses in the company's internal control system (Romney, 2015).

The fifth hypothesis test (H5) analyzes the effect of rationalization on fraudulent financial reporting detection. The results of the H5 test show a coefficient value of 1.206 with a p-value of 0.019 (<0.05). This result of the study explains that rationalization has a significant positive effect on fraudulent financial reporting detection. Thus, H5 is accepted. The results of this study support previous research (Sihombing, K. S., & Rahardjo, S. N., 2014) that the accrual basis provides an opportunity for management to modify financial statements in making management decisions.

The sixth hypothesis (H6) analyzes the influence of ego on fraudulent financial reporting detection proxied by CEO Duality. The results of the H6 test are known to have a coefficient value of 0.444 and a p-value of 0.000 (<0.05). These results explain that ego has a significant positive effect on fraudulent financial reporting detection. Thus, H6 is accepted. These results support previous research (Devi et al., 2021). CEO Duality will weaken the supervisory function because the directors feel they can escape the supervision carried out by the commissioners. Duality CEOs can give arrogance to directors who have duality positions because the directors think the rules don't apply to them.

The test results further explained that H7, H9, H10, and H11 were not accepted. The income tax rate does not act as a moderating variable that affects the variable “stimulus, collusion, opportunity, and rationalization” on fraudulent financial reporting detection. Income tax rates are not empirically proven to weaken the effect of the variable “stimulus, collusion, opportunity, and rationalization” (0.111> 0.05; 0.290> 0.05; 0.498> 0.05; 0.227> 0.05) on fraudulent financial reporting detection. Therefore, H7, H9, H10, and H11 are not accepted.

The use of lower income tax rates for public companies in Indonesia moderates the effect of capability (supervision by female commissioners) and ego (CEO duality) on fraudulent financial reporting detection, namely strengthening oversight and weakening CEO duality behavior. Lower-income tax rates can influence companies in deciding fraudulent financial reporting practices through commissioners and directors. Income taxes can moderate (strengthen or weaken) the relationship between capability and ego by the results of testing the eighth hypothesis (H8) and the twelfth hypothesis (H12). Income tax rates strengthen the influence of variable capability on fraudulent financial reporting, with empirical evidence in the form of a coefficient value of 0.691 and a p-value of 0.009 (<0.05). It stated that H8 is accepted. Furthermore, the income tax rate weakens the ego's influence on fraudulent financial reporting, a coefficient value of -0.310 and a p-value of 0.001 (<0.05). H12 is accepted.

Based on the test results is known that the "competitiveness" control variable as a proxy for firm size has a coefficient of 0.039 and a p-value of 0.000 (<0.05). The results showed that competitiveness had a significant positive effect on fraudulent financial reporting detection. This finding proves that fraudulent financial reporting detection is related to the size of the company because more competitive. This study support previous research (Ozcan, A., 2016). Furthermore, the "profitability" control variable as a proxy for ROA has a coefficient of -0.755 and a p-value of 0.194. Thus, profitability does not affect the detection of fraudulent financial reporting. The management of companies in the banking sector is relatively closely monitored by regulations and authorized institutions so that the achievement of company profitability (ROA) does not impact fraudulent financial reporting. The findings of this study support previous research (Firdausi, A., & Triyanto, D. N., 2021).

V. CONCLUSION

The purpose of this study is to obtain empirical evidence that can explain the effect of STM, CPB, CLL, OPP, RZN, and EGO on FFR, with ITR as a moderating variable. The independent variables (STM, CPB, OPP, RZN, and EGO) had a significant positive effect on FFR, and the other independent variable (CLL) did not affect FFR. The moderating variable (ITR) only plays a role in the relationship between CPB and EGO on FFR. Thus, H1, H2, H4, H5, H6, H8, and H12 are accepted. Meanwhile, H3, H7, H9, H10, and H11 were not accepted.

This study has limitations indicated by the Adjusted R2 coefficient of 0.7911 (79.11%) and third hypotheses (H3) still unproven. Future research recommended using other measurements for the "collusion" variable. The indicator of collusion in the form of the number of institutional shares needs to be investigated further with other supporting data regarding the actual beneficial owners.

This research has implications for regulators in detecting fraudulent behavior in financial reporting. Indonesia needs to continue to update policies, especially the Financial Services Authority (OJK), regarding the mechanism for early detection of fraudulent behavior is growing and varied. The implication for company managers is to provide input in preparing guidelines for the company's supervisory function to achieve better performance.

Suggestions for further research use research samples from other industries listed on the IDX, such as the banking sector. Measurement of variable "collusion" can use "partnership between companies and the government in a government project" where legal problems are often happening. The moderating variable in further research can use the tax incentive variable to measure the effect of tax policy on the influence of the fraud theory variable on FFR actions.

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