

Fraud Hexagon: Detection of Fraud of Financial Report in State-owned Enterprises in Indonesia

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ABSTRACT

This study aims to identify the potential for fraudulent financial reporting using the Fraud Hexagon approach with pressure, capability, collusion, opportunity, rationalization, and ego indicators. The population in this study is state-owned companies with observations for 12 years, from 2010 to 2021, and uses regression analysis with SPSS tools to test the Hypothesis. The results showed that pressure and ego could detect the potential for fraudulent financial reporting. There is a tendency for management to report conditions that are different from the actual conditions when under pressure in the form of performance targets that are not supported by the resources they have. CEO duality also provides an excellent opportunity for fraudulent financial reporting practices because when there is a position war, there is no cross-check between departments, so other parts cannot detect the potential fraud committed by the CEO. This condition also indicates weak control processes that provide wider opportunities for fraudulent financial reporting. At the same time, variables of ability, collusion, opportunity, and rationalization cannot detect financial statement fraud. This condition is because state-owned companies are required to implement the Minister of Finance Regulation number PER-11/MBU/07/2021 and the Financial Services Authority number 13/POJK.03/2017 as the basis for the implementation of Good Corporate Governance so that it is possible to commit financial reporting fraud very small.

KEYWORDS:

Fraud hexagon; financial report; State-owned Enterprise

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INTRODUCTION

Financial reports are essential for a company to communicate with stakeholders. Therefore, financial reports should not contain false information resulting from fraud or error that could mislead the users and affect the credibility of financial reports. Fraud is the intentional use of negligence or deceit of a material character that significantly negatively affects decision-making (Suryani, 2019). Fraud as a detrimental action will broadly impact all sectors, both internal to the company and industry in general. The Occupational Fraud 2022 "A Report to This Nations" Survey, published in 2022 by the Association of Certified Fraud Examiners (ACFE), offers a global examination of the costs and effects of fraud. The survey demonstrates fraud's enormous impact on businesses worldwide, spanning 2,110 real cases with origins in 133 countries in 23 industries, losing USD 3.6 billion. The average loss is USD1,783,000 in each case, while the five types of industries with the enormous losses are real estate, wholesale trade, transportation and warehousing, construction, and utilities. The government loses the most money due to fraud, with a percent loss of 48.5%, followed by state-owned companies losing 31.8%, private companies losing 15.1%, non-profit organizations losing 1.9%, and other organizations losing 1.7% (ACFE Indonesia Chapter, 2019).

Findings reinforce this condition (Indonesia Fraud Survei, 2019) that Indonesia is a country that has experienced 269 cases of fraud, including 167 cases of corruption, 50 cases of misuse of assets, and 22 cases of fraud in financial statements. Fraud is a deliberate act by one person against another in which information is manipulated or provided untrue for personal advantage or the benefit of a particular group at the expense of other parties (Murwaningsari, 2022). According to PwC's Global Economic Crime and Fraud

Survey 2022 (2022), 47% of participants acknowledge that fraud has occurred in their firm within the preceding 24 months. This analysis is consistent with earlier research showing that firms lose 5% of their annual income due to fraud (ACFE, 2020).

Based on the findings of the Financial Services Authority, Supreme Audit Agency, and the Indonesian Stock Exchange, there was a state-owned company, namely PT Garuda Indonesia, was indicated to have committed fraud in financial reports in 2018 by making a false statement that the company was in a profitable position, while in fact, the company suffered a loss of USD 175 million. Based on Winarto (2020) that PT Asuransi Jiwasraya failed to pay an insurance claim of Rp814 billion at the end of 2019. The company's inability is due to the director's careless decision-making in making insurance products and weak standard protocols for investing customer funds (Lumbanrau, 2019). This phenomenon indicates the existence of fraudulent practices in several state-owned enterprises. Some research related to fraud shows inconsistent results. Purnaningsih (2022) found that ability, rationalization, arrogance, and collusion positively affected the fraud of financial reports. However, the pressure and opportunity have a negative effect on the fraud of financial reports. Chantia, Guritno, and Sari (2021) concluded that pressure, ability, opportunity, rationalization, and collusion had a strong effect on detecting fraudulent financial statements, while ego had no effect. Nevertheless, Sagala and Siagian (2021) show that only the pressure variable affects financial statement fraud, while the other fraud hexagon elements do not.

Jensen and Meckling (1976) describe an agency relationship where the owner delegates decision-making authority to the management and engages the manager to carry out tasks on the owner's behalf. The agent

(manager) acts to maximize his utility, whereas the principal (owner) requests that the agent operates according to his expectations. Due to this conflict of interests, the principal must pay agency fees to regulate management performance. This conflict of interest may lead to unethical financial reporting methods and fraudulent behavior. Fraud is someone's behavior that is carried out intentionally to harm society, companies, or the government to achieve personal interests (Albrecht, Albrecht, Albrecht, & Zimbelman, 2018). Cressey (1953) presents the fraud triangle, which holds that three components, namely pressure, opportunity, and rationalization, are the basis of the occurrence of fraud and responsible for a person's motivation to commit fraud. Eventually, this theory evolved into a diamond fraud model, which proposes pressure, ability, opportunity, and rationalization as reasons for deception (Wolfe & Hermanson, 2004). In addition, Marks (2009) re-developed the diamond fraud model into a Pentagon Fraud by adding arrogance as a new element in triggering fraud.

The hexagon fraud theory was born as a renewable theory in detecting triggers for fraud. This theory was developed by adding a new element, collusion, as a trigger for fraud (Vousinas, 2019). The element of collusion is added based on major fraud cases such as Enron, Parmalat, and Worldcom, showing that collusion is central to fraud and financial crimes. The same condition also occurs in Indonesia, such as in the case of Garuda Indonesia and Jasa Raharja, which is evidence of collusion that facilitates fraud. Based on the findings of the ACFE Survey (2020) shows that more than one colluding individual commits 51% of frauds. Offenders tend to raise the value of the loss, particularly when three or more players collaborate to perpetrate fraud (ACFE, 2020).

Ghozali, Achmad, and Pamungkas (2019)

found that fraud in financial reports was the submission of financial reports with material inaccuracies that were detrimental to the users of financial reports. Meanwhile, Aviantara (2021) finds that fraud in financial reports is defined as the deliberate misrepresentation or omission of information from a firm's financial reports to deceive readers into thinking the business is in a more advantageous financial position than it is. It can be done by exaggerating income, assets, and profits or by understating losses or hiding profits or income for a certain period to help increase profits or income in the next period (Aviantara, 2021). Statement on Auditing Standard Number 99 of 2002 mentions several ways to carry out fraud of financial report actions, including manipulating, falsifying, or changing supporting documents and accounting records for the preparation of financial reports; negligence, mistake or intentional obstruction of transactions, events or information which is the source of report submission finance; and deliberate misuse of principles related to amount, classification, the procedure for disclosure or presentation (AICPA, 2017).

This study examines how the Fraud Hexagon model's components affect the ability to spot false financial statements. This study has updates which are the relatively long observation period of 10 years in the analysis unit of state-owned companies (Badan Usaha Milik Negara, BUMN) and the Related Party Transactions (RPT) measuring instrument as an indicator for measuring collusion variables which are believed to be the most relevant measuring tools and still rarely used in previous studies.

Fraud can occur due to pressure from individuals in the form of bad habits and a lack of appreciation from the company, both in the form of performance awards and inadequate salary levels. Pressure can also come from companies through performance tar-

gets that must be realized. "Stimulus" is the pressure that fosters illegal financial or non-financial actions (Vousinas, 2019). Pressure occurs when the company's performance has decreased from the average industry performance. This situation demonstrates how the business could not properly utilize its assets and investment capital, even though management is needed to help it reach its targeted goals (Skousen, Smith, & Wright, 2009). The agent has set a gauge for the financial aim in the form of business returns (Apriliana & Agustina, 2017). With the management under pressure in the form of corporate objectives and the resources that cannot support achieving these goals, management attempts to manipulate financial reporting. This may appear to be fraudulent financial reporting (Purwatmiasih, Sudrajat, & Oktavia, 2021).

The capacity is a person's ability to defraud undetected by the company's controllers. It happens when someone has a position that gives rise to the capacity to create or use opportunities others do not have (Ruankaew, 2016). Those opportunities can be used to commit fraud. Changes in the company, like the change of directors, allow the new directors to control all information and control, providing opportunities for fraud. Based on this, the capability variable in this study is measured by the director turnover indicator.

Collusion is an activity that involves two or more people jointly carrying out activities to steal company assets or make intentional recording errors. According to Vousinas (2019), collusion can occur when two or more people agree to commit fraud together. At the same time, Felli and Vallve (2015) state that collusion is a two or even more collaboration or agreement to defraud. Based on Felli and Valve (2015), the agent, in this case, managers and employees, have immense opportunities for collusion that is challenging for principals to detect. This

study measured collusion variables using RPT indicators. RPT is a transfer of management wealth through subsidiaries or related parties. Nugroho and Diyanty (2022) discovered that businesses with high RPT often work with linked parties.

Opportunity is a circumstance or state that makes the possibility for the fraudster to act. In this condition, the perpetrator believes the fraud will not be detected (Vousinas, 2019). Opportunities arise due to abuse of power and weak supervision (Lastanti, Murwaningsari, & Umar, 2022). Opportunity variables can be proxied by using the quality of external auditors, ineffective monitoring, and whistleblowing systems. Romney, Steinbart, Mula, McNamara, and Tonkin (2012) state that opportunity is a situation where actors can act and hide dishonest actions to gain personal gain. The quality of the external auditor is used in this study to gauge the opportunity variable. The selection of external auditors is considered an effort to prevent information asymmetry between principals and agents and to carry out independent checks to reduce opportunities for fraudulent financial statements (Ijudien, 2018). The act of rationalization serves to defend the fraud that has been perpetrated. Wolfe and Hermanson (2004) state that rationalization is an attempt to convince oneself that fraud is worth the risk. Fraud perpetrators feel that the fraud committed is a natural and appropriate thing to do.

Some fraud perpetrators carry out rationalization actions to cover up the fraudulent actions committed (Vousinas, 2019). In this study, rationalization is determined by changing auditors. Companies that frequently change auditors indicate that the company wants to avoid fraud detection found by previous auditors (Umar, Partahi, & Purba, 2020). Ego is an attitude possessed by someone who feels that they have a higher rank and authority, so company policies do not

apply to him (Vousinas, 2019). A person's lack of conscience causes them to develop an underlying sense of superiority, power, and greed known as ego, according to which they believe that internal control somehow does not belong to them (Crowe, 2012). In this study, the ego variable was measured by indicators of Chief Executive Officer (CEO) duality or CEOs with multiple positions.

The principal and agency try to satisfy their respective interest. Therefore, financial targets have a close relationship with the Agency Theory. Management as an agency hopes to get a bonus for fulfilling the principal's wishes, namely the financial target in the form of profit. Management will use every attempt to meet its financial target to receive greater bonuses. However, high financial goals will put management under pressure and motivate managers to conduct fraud on financial statements (Maryani, Natita, & Herawati, 2022). So, it can be said that the greater opportunity for financial report fraud, the greater the company's financial target (Agusputri & Sofie, 2019; Wicaksono & Suryandari, 2021). Based on this premise, the following hypothesis put forth is:

H1: The pressure has a positive effect on the potential of fraud in financial reports.

Nugroho and Diyanty (2022) also Aviantara (2021) state that capability is management's ability to manage or lead a company, and someone with this capability tends to commit fraud. The perpetrators of fraud begin with the ability to find loopholes and create opportunities to carry out activities that are personally beneficial. Fitri, Syukur, and Justisa (2019) also Larum, Zuhroh, and Subyantoro (2021) find that changes in the board of directors positively impact the likelihood of fraud in financial reports. A specific political motivation for removing the outgoing board of directors may be reflected in changes to management or the board of directors. Changes in the board of directors

could be utilized to get away from individuals who hinder fraud. Management can use power to manipulate decisions to eliminate parties that hinder management from committing fraudulent financial statements. The hypothesis put forth is:

H2: Capability positively affects the potential of fraud in financial reports.

Achmad, Ghozali, and Pamungkas (2022) argue that collusion happens when parties agree to use corporate mechanisms resulting from internal business transactions to achieve goals that only benefit their interests. Typically, businesses shift organizational resources to subsidiaries or RPT. Nugroho and Diyanty (2022) argue that RPT can be used as a means of laundering wealth which can be seen from the number of RPT transactions the company has with its affiliates to ensure that any fraud in RPT can be investigated. Habib, Muhammadi, and Jiang (2017) reveal that companies that carry out high RPT tend to collude with related companies, so they have the potential to commit financial statement fraud. The hypothesis is:

H3: Collusion has a positive effect on the potential of fraud in financial reports.

The external auditor conducts an audit process driven by the information asymmetry between the principal and agency within the company. By engaging an expert external auditor to review the financial reports, the risk of substantial misstatements can be minimized. The external auditor's assessment of financial information's fairness can help reduce information asymmetry and prevent agency fraud. Financial statement fraud poses a significant risk to users when financial statements contain significant errors. Therefore, it is crucial to ensure that financial reports are accurate and reliable (Handayani & Evana, 2022). The hypothesis put forth is:

H4: Opportunity has a positive effect on the potential of fraud in financial reports.

A rationalization, as stated by Achmad et al. (2022), refers to the attempt to justify the deceitful actions of the offender. Fraud perpetrators rationalize their actions to fortify themselves from all accusations directed at them, with the perception that their fraudulent actions are natural and not a violation. Rationalization can be demonstrated by frequent management changing external auditors (Nugroho & Diyanty, 2022). Changes in auditors can be seen as an effort to eliminate fraud traces discovered by earlier auditors (Lou & Wang, 2009). So, the possibility of a misleading financial report increases with the frequency of modifications to financial reports made by companies (Umar et al., 2020). The hypothesis is:

H5: Rationalization has a positive effect on the potential of fraud in the financial report

Ego management can be observed through CEO duality, namely, CEOs who occupy more than one position in a company (Kamarudin, Ismail, & Samsuddin, 2012). CEO duality tends to take advantage of its position by taking actions that have the potential for fraud due to the inadequate oversight function (Wicaksono & Suryandari, 2021), so fraud committed is more difficult to detect (ACFE Indonesia Chapter, 2019; Yang, Jiao, & Buckland, 2017). The hypothesis is:

H6: Ego has a positive effect on the potential of fraud in the financial report

RESEARCH METHOD

The variables used are the potential fraud in the financial report, pressure, capability, collusion, opportunity, justification, and ego. The data examined in this study are financial reports from state-owned companies listed on the Indonesia Stock Exchange (IDX)

during the years 2010 to 2021 by using a quantitative research methodology. Probability-purposive sampling was used to determine the sample, and the criteria used were BUMN enterprises with an IDX listing for the 2010–2021 time frame and BUMN enterprises with 2010–2021 complete financial reports published.

Several ways can be used to measure fraud variables in financial reports, including the M-score, F-score, and Altman Z-score (Vousinas, 2019). This study uses the F-score to measure the variable financial statement fraud because this indicator was considered the most effective for predicting financial statement fraud. This study assessed the pressure variable using return on assets (ROA) as a financial goal indicator (Larum, 2021). The formula for the F-score model is described in Appendix 1. If a company has an F-score value of more than one, it is indicated that it is committing financial statement fraud. Meanwhile, there is no proof of fraud when the company's F-score is below one. The measures with each independent variable are displayed in Table 1.

The influence between the dependent variable, which is the components of the hexagon fraud model, and the predictor variable, which is financial statement fraud, is examined using a multiple regression model. Based on operational definitions and variable measurements, the model is as follows:

$$\text{Fraud in financial report} = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + e$$

..... (1)

RESULT AND DISCUSSION

The object of research is state-owned companies and as many as 20 companies according to the criteria, so there are 240 companies as samples analyzed. After testing, it turned out

Table 1. Independent Variable Measurement

Variable	Model	Measurement
Pressure (X1)	Financial Target	$ROA = \frac{Profit}{Total\ Asset}$ (Zaki, 2017)
Capability (X2)	Directors Alterization	Dummy variable: Write 1 if there is a change in the main director for the 2016-2020 period and code 0 if not. (Situngkir & Triyanto, 2020)
Collusion (X3)	Related Party Transaction	$RPT\ AL = \frac{RPT\ asset + RPT\ liabilities}{Equity}$
Opportunity (X4)	Quality of External Auditors	Dummy Variable: Write 1 when using KAP BIG 4 audit services, and 0 if not (Larum, 2021).
Rationalization (X5)	Auditor Alteration	Dummy variable: Code 1 if there is a voluntary change of KAP in the 2016-2020 period and if 0 otherwise (Wicaksono & Suryandari, 2021)
Ego (X6)	CEO Duality	Dummy variable: Code 1 if the main director has more than one position and code 0 if the main director has only one position (Maryani et al., 2022).

that the research data were not normally distributed, so the author decided to eliminate outlier data using the outlier box spot method and obtained 176 samples. Descriptive statistics for the data are presented in Table 2. The data in this study were normally distributed, as shown by the Kolmogorov-Smirnov test results, which showed a significance value of 0.200 greater than 0.05. Multicollinearity test results show that each variable has a tolerance value of more than 0.100 and a VIF value of less than 10.00, so it is free from multicollinearity. The heteroscedasticity test used the scatterplot graph as a testing tool. The points are scattered above and below 0 on the Y-axis, as shown in the

scatterplot image. These points also do not have a clear pattern, such as wavy, widened, or narrowed. Hence, it can be said that there were no signs of heteroscedasticity in the study's data. A Durbin-Watson (DW) value of 1.848 was obtained from the Durbin-Watson test results. The 4-DU value is 2.1757, and the upper limit value for $k = 6$ and $n = 176$ is 1.8243. Thus, it can be inferred that the data in this study do not exhibit autocorrelation.

The results of hypothesis testing are presented in Table 3. According to the H1 test results, which reveal a significance value of 0.000, below the threshold of (0.05), pres-

Table 2. Descriptive Statistics Test

	N	Minimum	Maximum	Mean	Std. Deviation
Pressure (X1)	176	-.060	.185	.04155	.045220
Capability (X2)	176	0	1	.30	.458
Collusion (X3)	176	.001	5.519	1.08245	1.196322
Opportunity (X4)	176	0	1	.59	.493
Rationalization (X5)	176	0	1	.18	.387
Ego (X6)	176	0	1	.27	.444
Fraud of Financial Report (Y)	176	-.359	.482	.09742	.147537
Valid N (listwise)	176				

sure has a favorable impact on the likelihood of dishonest financial reporting in BUMN enterprises. Financial targets that management must meet might put pressure on them, which can lead to fraud. The financial target indicates management's success in managing the company. The financial target in this study is proxied by using a profitability ratio, namely ROA. This ratio examines the company's effectiveness in managing its assets to generate profits (Skousen et al., 2009). According to Daromes and Jao (2020), financial targets are also commonly used to assess managerial performance to determine wage increases, bonuses, and others.

When management can meet these targets, management is considered successful in realizing stakeholder interests. Financial targets can be a motivation as well as pressure for company management. The management will attempt to assist the organization in meeting its predetermined goals. Managers may feel under pressure to submit financial reports that are not accurate representations of the situation. The findings of this study are indeed consistent with earlier studies that discovered that pressure on management is the main trigger for deception (Agusputri & Sofie, 2019; Wicaksono & Suryandari, 2021; also Riyanti & Trisanti, 2021).

According to the test results, the capability variable (X2) has a significance value of $0.414 > 0.05$. This demonstrates that the possibility of fraudulent reporting is unaffected by the capacity indicator provided by the change in directors. The competence of the board of directors to run the business effectively means that when the directors' performance falls short of the standards established by the company, a replacement will be made. According to Handoko and Natasya (2019), altering the board of directors is anticipated to boost corporate performance. In determining candidates for directors of BUMN companies, this has been regulated in the BUMN Ministerial Regulation of the Minister of State-Owned Enterprises of the Republic of Indonesia Number PER-11/MBU/07/2021 concerning Requirements, Procedures for Appointment and Dismissal of Members of the Board of Directors of State-Owned Enterprises. This regulation regulates the selection mechanism for selecting prospective BUMN board of directors members to be appointed.

In this study, the change of directors during the observation period was carried out 52 times or 30% of the total 176 samples. According to Financial Services Authority Regulation Number 27/POJK.03/2016, mem-

Table 3. Hypothesis Testing

Model	Unstandardized Coefficients		Standardized Co-	t	Sig.	Conclusion
	B	Std. Error	efficients Beta			
(Constant)	.042	.025		1.678	.095	
Pressure (X1)	.954	.252	.292	3.791	.000	H ₁ Accepted
Capability (X2)	.019	.024	.060	.818	.414	H ₂ Rejected
Collusion (X3)	-.004	.009	-.034	-.448	.655	H ₃ Rejected
Opportunity (X4)	-.001	.022	-.004	-.061	.952	H ₄ Rejected
Rationalization (X5)	-.002	.028	-.004	-.059	.953	H ₅ Rejected
Ego (X6)	.061	.024	.182	2.486	.014	H ₆ Accepted

a. Dependent Variable: Fraud of Financial Report (Y)

bers of the board of directors can be fired or appointed by the shareholder's general meeting after passing the fit and proper test. Substitution of directors in state-owned companies generally occurs because directors hold multiple positions outside the company, directors who have served more than two terms, and directors who have entered retirement. In Article 17 of the BUMN Minister Regulation Number PER-11/MBU/07/2021, it is explained that Directors in BUMN companies can be dismissed before their term of office expires if the performance of the directors is deemed not as expected involved in actions that cause losses to BUMN, violates the code of ethics of directors BUMN and others. The company runs a director orientation program whenever a director changes to enable board members to collaborate despite having different educational backgrounds. This program gives a basic overview of the company's current condition. This program will also minimize stress periods that can trigger fraudulent financial reporting. This test's results align with the research of Achmad et al. (2022) also Nugroho and Diyanty (2022). However, they differ from the research results by Aviantara (2021) and Larum et al. (2021), who argue that changes in directors affect the potential for fraudulent financial reporting.

The test findings indicate a significance value of 0.655 larger than (0.05), which renders H_3 unacceptable. This means that the collusion variable proxied by the RPT does not affect the potential for fraudulent financial reporting. In State-owned companies, most of the subsidiary companies are suppliers of the need of the main company, so the transfer of resources from the main company is a series of business process cycles that cannot be combined as financial statements. So far, the activities of BUMN companies have been running according to the applicable regulations, namely the Minister of Finance Regulation number PER-11.mBU/07/2021. These regulations detail the company's operations, limit-

ing fraudulent financial statements in the BUMN. Kang, Lee, Lee, and Park (2014) defined RPT as transactions involving related parties, such as shareholders, associated companies, and board members. RPT can be used to transfer the wealth of the board of directors so that companies with high RPT numbers tend to commit collusion and have the potential to commit fraud. Besides that, Habib et al. (2017) discover that businesses with a large RPT transaction volume prefer non-big Four auditors, which raises the risk of a business working together to perpetrate a fraud on financial statements.

Nonetheless, RPT is conducted honestly (Arm's Length) in compliance with customary business requirements and legal requirements as recorded in PMK Number 7/PMK.03/2015 regarding the Implementation of Transactions on Special Relationships for state-owned enterprises in Indonesia (Peraturan Menteri Keuangan Republik Indonesia, 2015). In addition, the RPT is carried out based on the company's needs and is free from conflicts of interest because the RPT is accompanied by disclosure of transactions by Statement of Financial Accounting Standards (Pernyataan Standar Akuntansi Keuangan, PSAK) Number 7 and Capital Market and Financial Services Supervisory Body (Badan Pengawas Pasar Modal dan Lembaga Keuangan, Bapepam LK) Regulation Number KEP-347/BL/2012 concerning Financial Presentation and Issuers and Public Companies Disclosure.

This study shows that all state-owned companies in Indonesia conducted transactions with RPT. However, the RPT must be carried out by the Regulation of the Minister of Finance of the Republic of Indonesia Number 7/PMK.03/2015 concerning Procedures for Forming and Implementing Price Agreements Transfer (Advance Pricing Agreement). So, the possibility for companies to commit collusion is minimal. Additionally,

there is little chance of false financial statements being made. This observation is consistent with studies conducted by (Nugroho & Diyanty, 2022) demonstrates that the possibility of fake financial statements is unaffected by RPT.

According to the results, H4 is not accepted; there is no connection between the caliber of the external auditor and the possibility of misleading financial reporting. The quality of the external auditor is considered the first filter in detecting loopholes in the company's financial system to find fraud in the company's financial reporting. When an external auditor has a new client, there is a possibility they cannot adapt, or they also possible that the assigned auditor does not have specific competence with the new client's business processes. Hence, the client's limited understanding cannot detect the fraudulent financial report. Agency problems will arise when shareholders do not examine all management activities so that there are opportunities for management to commit acts of fraud, especially fraudulent financial statements. When performing their tasks, every public accounting firm, including the Big Four and non-Big Four, has adhered to the same auditing standards and public accounting profession code of ethics established by the Indonesian Institute of Certified Public Accountants (Institut Akuntan Publik Indonesia, IAPI). The data analysis results show that 98 or 55% of BUMN companies use the services of the big four public accounting firm (Kantor Akuntan Publik, KAP), while the rest use KAP services in the top 10 rankings.

The selection of KAPs for BUMN companies is following the Decree of the Minister of State-Owned Enterprises of the Republic of Indonesia Number: SK-103/MBU/03/2021 concerning Criteria for Public Accounting Firms, Public Appraisal Service Offices and Actuarial Consultant Offices in State-Owned

Enterprises. The KAP appointed to audit must meet the criteria following these regulations so that they have the same audit quality. It is believed that applying quality inspection standards and audit processes will be able to find possible fraudulent practices earlier. Therefore, it can be concluded that the likelihood of fraud in the financial report is unaffected by the external auditor's performance using the four major KAP indicators. The results of this research align with those done by Setiawati and Baningrum (2018) also Nadziliyah and Primasari (2022), who argue that using quality external auditors does not affect the potential for fraud in financial reports.

According to Table 3, the rationalization variable's significance value is $0.953 > 0.05$, meaning that the fifth hypothesis is rejected. These findings suggest that the possibility of dishonest financial reporting is unaffected by rationalization with indicators of shifting auditors in an organization. The company's change of auditors is considered an act of rationalization to justify fraudulent acts committed by management. Auditor replacement is carried out to eliminate traces of fraud committed before because the newly appointed auditor will require an adaptation period to study the company to be audited so that the audit results show unsatisfactory results compared to the previous auditor. This condition usually occurs when the auditor is voluntary, which means the auditor changes before the audit period must change.

The Financial Services Authority Regulation Number 13/POJK.03/2017 governing the Usage of Public Accountant Services and Offices of Public Accountants in Financial Service Activities applies to auditor changes in state-owned businesses in Indonesia. According to Article 16, the Party Conducting Financial Services Activities may only use audit services for a maximum of three con-

secutive reporting years on yearly historical financial information from the same KAP. Company dissatisfaction with the previous auditor's performance is also one reason for changing auditors in state-owned companies. Only 32 or 18% of companies changed auditors in this research from 2010-2019. These results indicate that only a few companies have changed auditors within a decade of observation. This leads to the conclusion that the former auditor's traces were meant to be retained by the new auditor. In general, auditor changes are made because contracts have ended, and there is another phenomenon where auditor changes are intended to reduce company audit fees to improve corporate governance (Larum et al., 2021). This discovery is consistent with the findings of Nanda, Salmiah, and Mulyana (2019) also Achmad et al. (2022).

The Ego variable's significance value in the hypotheses test is $0.014 > 0.05$, supporting H6. This suggests that ego, as determined by CEO Duality, influences the likelihood of fraudulent financial disclosures. A CEO who holds several jobs will use each to advance the company and himself to keep his current position. The supervisory role performed by the audit committee and commissioners may be weakened by directors who hold numerous responsibilities. In addition, CEO duality can breed hubris among directors who hold several positions because they believe the rules do not apply to them. Forty-nine companies in the survey, or 28%, had CEOs that held numerous responsibilities. Most State-owned Enterprises are beginning to understand how the ego element might increase the likelihood of misleading financial reporting. In order to eliminate conflicts of interest that could result in corporate fraud, several BUMN firms currently have provisions in their Articles of Organization that forbid holding concurrent positions in separate business enterprises or governmental institutions. These results confirm studies by

Meidijati and Amin (2022) also Yang et al. (2017) that claim CEO duality influences the likelihood of dishonest financial reporting.

CONCLUSION

The study results show that the possibility of dishonest financial reporting is positively impacted by pressure, as measured by financial targets, and ego, as measured by CEO duality. As a result, the likelihood of fake financial reporting will increase when a company's financial aim is higher to show excellent business performance and draw investors. A director's ego will also be brought out when they hold multiple positions, leading people to believe they are exempt from the regulations. The likelihood of dishonest financial reporting is unaffected by additional criteria, including capability, collusion, opportunity, and rationalization. The long observation period allows the generalization of the results of this study to be quite broad because the line of business and company characteristics also occur in other companies outside the unit of analysis of this observation. Because the adjusted R² value in this study is relatively low, indicating that many other factors influence the likelihood of fraudulent financial reporting, the researchers believe that free cash flow. It is recommended to use an additional independent variable, such as whistleblower and accounting systems.

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APPENDIX

Appendix 1. The Formula for F-score Model

$$F - Score = Accrual\ Quality + Finance\ Performanc \dots\dots\dots (1)$$

Accrual quality is calculated using accrual RSST which is formulated as follows:

$$RSST\ Accrual = \frac{(\Delta WC + \Delta NCO + \Delta FIN)}{\text{The Average of Total Aset}}$$

Details:

WC = (Current Assets - Short Term Liabilities)

NCO = (Total Assets - Current Assets - Investments and Advances) – (Total Short Term Liabilities - Long Term Liabilities)

FIN = (Total Investment – Total Liabilities)

Financial Performance = Change in Receivables + Change in Inventory + Change in Cash Sales + Change in Revenue

$$\text{Receivable Changes} = \frac{\Delta \text{Receivables}}{\text{Average of Total Assets}}$$

$$\text{Inventory Changes} = \frac{\Delta \text{Supply}}{\text{Average of Total Assets}}$$

$$\text{Changes in Cash Sales} = \frac{\Delta \text{Sales}}{\text{Sales}(t)} - \frac{\Delta \text{Receivables}}{\text{Receivables}(t)}$$

$$\text{Changes in Revenue} = \frac{\text{Revenue}(t)}{\text{Average of Total Assets}(t)} - \frac{\text{Revenue}(t-1)}{\text{Average of Total Assets}(t-1)}$$

Source: Sakti, Tarjo, Prasetyono, & Riskiyadi. (2021)

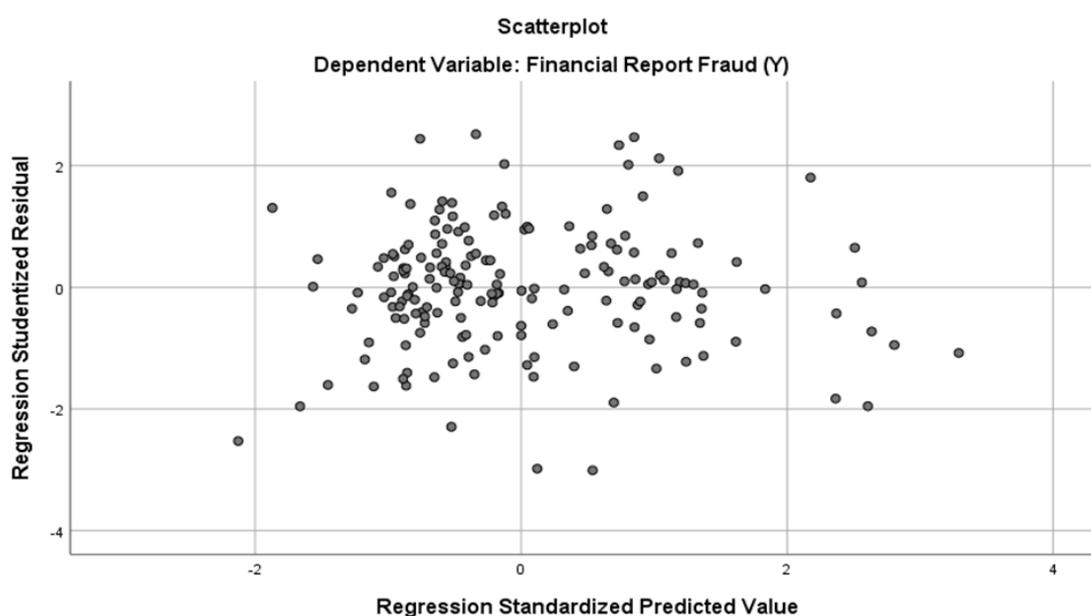
Appendix 2. Normality Test Result

		Unstandardized Residual
N		176
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.13721520
Most Extreme Differences	Absolute	.061
	Positive	.047
	Negative	-.061
Test Statistic		.061
Asymp. Sig. (2-tailed)		.200 ^{c,d}

Appendix 3. Heteroskedasticity Test Result

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Pressure (X1)	.860	1.163
Capability (X2)	.958	1.044
Collusion (X3)	.886	1.128
Opportunity (X4)	.955	1.047
Rationalization (X5)	.985	1.016
Ego (X6)	.955	1.047

Appendix 4. Multicollinearity Test Result



Appendix 5. Durbin Watson Autocorrelation Test Result

Total of Independent Variables (K)	Total Samples (N)	Value of Durbin-Watson (DW)	Upper Limit Value (DU)	Value 4-DU	Conclusion
6	153	1.848	1.8243	2.1757	There are no signs of autocorrelation

b. Dependent Variable: Fraud of Financial Report (Y)

Appendix 6. F-Statistics Test Result

Model	Sum of Squares	df	ANOVA ^a		
			Mean Square	F	Sig.
Regression	.514	6	.086	4.397	.000 ^b
Residual	3.295	169	.019		
Total	3.809	175			

a. Dependent Variable: Fraud of Financial Report (Y)

b. Predictors: (Constant), Ego (X6), Collusion (X3), Rationalization (X5), Capability (X2), Opportunity (X4), Pressure (X1)