Fraud Hexagon and corporate governance analysis on the potential fraud in financial statements

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Abstract: This research examines the impact of corporate governance and the Fraud Hexagon on possible financial statement fraud. The Fraud Hexagon is a fraud theory proposed by Vousin in 2019 which is a development of the previous fraud theory. This research uses two independent variables, including the Fraud Hexagon, which consists of six factors and corporate governance. The likelihood of fraud in financial statements is also a dependent variable in this research. State-owned businesses (BUMN) and related entities that are listed on the Indonesia Stock Exchange (BEI) serve as the research object. To analyse the data for this research, logistic regression was used. According to the test results, opportunity and rationalisation have a very significant impact on the possibility of financial statement fraud, as do pressure and capability, and collusion testing. However, arrogance and corporate governance have no significant impact on the financial statement fraud.

Keywords: Financial Statement Fraud; Fraud Hexagon; Corporate governance; State-Owned Enterprises

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Introduction

Financial reports are a means for companies to disclose information owned by the entity to internal and external parties as stakeholders. The stakeholders can measure a company's performance by using financial reports as a benchmark medium (Achmad, 2018). Financial statements are a crucial component of financial reporting since they are the final outcome of an accounting process and affect how management, investors, creditors, and other users make decisions about a company. (Agusputri & Sofie, 2019). However, in practice, there are publications of company financial statements that contain information that should not be there, indicating the existence of fraudulent practices in the entity's financial statements. The existence of discrepancies in financial statements harm the company, especially the trust of external stakeholders invested in the sustainability of the company. The Association of Certified Fraud Examiners (ACFE) (2020) divides fraud into 3 (three) main categories, including corruption, asset misappropriation, and financial statement fraud.

Figure 1. Classification of Fraud According to ACFE

Financial statement fraud can be interpreted as when an employee intentionally causes an error in presenting information or omits material information in the entity financial statements (ACFE, 2020). When analysed in terms of the average loss per case, fraudulent financial reporting contributed the most significant value of all fraud. In addition, based on the Indonesian Fraud
Survey conducted by ACFE Indonesia in 2019, State-Owned Enterprises (BUMN) ranked second based on institutions that were most harmed by fraud at 31.8%.

To explain the causes of fraudulent practices, numerous fraud detection models have been developed. The Fraud Triangle model, created by Cressey (1953) has three components: pressure, opportunity, and rationalisation. The Fraud Diamond was a further development of the fraud model, developed by Wolfe and Hermanson in 2004. The fraud model then developed into the Crowe Fraud Pentagon model proposed by Marks (2011). The components of competence and arrogance complement the components of the Fraud Triangle model.

The Hexagon Fraud model was developed by Vousinas (2019). It comprises of six components that might lead to fraud: Stimulus (Pressure), Capabilities, Opportunities, Rationalisation, Ego (Arrogance), and Collusion. Pressure is the motive that triggers someone to commit fraud, opportunity is the gateway to fraud, and rationalisation is an exculpation that the perpetrator uses to believe their actions are not a violation (Cressey, 1953). Capability is the capacity a person possesses to take advantage of possibilities that are already present (Wolfe & Hermanson, 2004). Due to the nature of greed and the notion that one is exempt from internal restraint, arrogance is an attitude of superiority and diminished sensitivity (Marks, 2011). Finally, collusion is the agreement between two or more parties when one acts maliciously (Vousinas, 2019). Based on the results of the ACFE survey (2019), 36% of fraud is carried out collusively by 4 (four) or more people and can cause losses of more than 10 billion rupiah. This data shows that financial statement fraud is a routine practice that can result in significant nominal losses in each instance. This fact is also relevant to the Fraud Hexagon model which is a new model with the addition of a collusion factor.

The main reason for choosing BUMN companies and BUMN affiliated entities as research objects is because 24.3% of the total capitalisation of funds in the Indonesian capital market are controlled by BUMN companies and BUMN affiliated entities. Market capitalisation data as of December 2019 shows that several shares of state-owned companies are included in the Big Cap (the entity with the highest market capitalisation), whereas two of the top three corporations in terms of market capitalisation are state-owned companies. In line with this, fraud involving state-owned companies continues to occur and involves large state financial losses. Fraud cases generally go on for a long period, meaning they are cumulative in harming state finances, and the impact causes state financial losses in significant amounts. This study is unique compared to previous research because it conducts an analysis using a combination of fraud hexagons composed of six factors, and corporate governance as an independent variable on the likelihood of fraud in financial statements, estimated through the Beneish M-Score in one main model. Beneish M-Score uses financial ratios as a statistical form, calculated using the company’s accounting information to verify the possibility that the profits presented by the company indicate manipulation. The measurement of corporate governance uses a different measurement compared to previous research. It uses measurement in the form of weighting from the implementation of the Financial Services Authority (OJK) Regulation Number 21 of 2015 about implementation of the directive for Good Corporate Governance which is further regulated by using the SE OJK Number 32 of 2015 about directive for Corporate Governance, which is structured through five aspects,
eight principles, and 25 recommendations for the implementation in corporate governance so that it is more comprehensive. Furthermore, the objects studied are BUMN entities and affiliates, which are still rare enough to be used as research objects. This research is expected to become additional literature related to the potential for fraud in financial statements related to research in auditing and financial accounting on a capital market basis. Additionally, it is anticipated that this research will help BUMN and OJK implement the corporate governance-related regulations they have developed. Furthermore, this research can provide additional knowledge and guidance when identifying any potential fraud in the financial statements of an entity to the benefit of its auditors, investors, and other parties.

**Methods**

The research method adopted is a quantitative one which includes a way to conduct the testing process on a specific theory by conducting research on the relationship between the variables being tested. Secondary data becomes the data used in the testing process. Data that is not directly provided to data collectors, such as through manuscripts or other individuals, is referred to as secondary data (Sugiyono, 2017). Financial reports, annual reports, and other reports used in this report that support the research and are published to the public are secondary data. In this study, all BUMN companies and BUMN-affiliated entities listed on the IDX from 2016 to 2020 are included in study population. The sample is chosen using the following criteria using purposive sampling: (1) BUMN companies and BUMN affiliated entities that have been listed on the IDX since December 31, 2015; (2) BUMN companies and BUMN affiliated entities that are not included in the financial sector on the IDX; (3) BUMN companies and BUMN affiliated entities that already published financial statements and annual reports for the reporting year 2016 to 2020.

The population of this study is comprised of all BUMN corporations and BUMN associated entities listed on the IDX as of December 31, 2020, a total of 33 companies, with details of 16 companies being the parent entity of BUMN and 17 companies being affiliated entities of BUMN. By applying the purposive sampling method to obtain data that match the required criteria, the total sample to be used in this study is a total of 21 samples. By using a monitoring period of five years, namely 2016 to 2020, then total observations in this research were 105 objects. The problem in this study will be formulated as follows: (1) Is there a connection between the fraud hexagon factor and the likelihood of fraud in the financial statements?; and (2) Is corporate governance related to the likelihood of fraud in the financial statements?

Based on the formulation of the problem, the research objectives are as follows: (1) Knowing whether the fraud hexagon factor indicates the likelihood of fraud in the financial statements; and (2) Knowing whether corporate governance indicates a likelihood of fraud in the financial statements.

Using moderating indicators, Rahayu (2020) studied how the Fraud Triangle affected fraudulent financial reporting. Pressure (financial steadiness), opportunity (sufficient monitoring), and rationalisation are the indicators considered. According to the study’s findings, rationalisation has a positive impact on these metrics, but financial steadiness and effective oversight have little bearing on them. Using indicators of financial targets, individualised financial needs, outer pressures, industry characteristics, effective monitoring, changes in KAP, and changes by company directors in measuring fraud diamonds, Chandra and Suhartono (2020) investigated the impact of diamond fraud and corporate governance to uncover the likelihood of fraudulent financial statements. The findings suggest that while outer pressure, individual financial requirements, changes in KAP, and changes in business directors have no bearing on the likelihood of a fake financial statement, financial targets, industry features, and changes in KAP have a favourable influence.

Bawekes et al. (2018) did another investigation on the fraud model, using the Fraud Pentagon model as a test reference for deceptive financial reporting. Financial goals, financial health, outside influences, ownership by institutions, ineffective control, external audit capacity, auditor changes, changes of directors, and the number of high-ranking executive officer portraits are the indicators employed in this study. The study’s findings indicate that financial health and the

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quantity of executive officers’ portraits have a big impact on financial statement fraud. The existence of fraud in the financial statements is not significantly impacted by financial goals, outside influences, ownership by institutions, ineffective control, external audit capacity, auditor changes, or changes of directors.

Agusputri et al. (2019) conducted a test regarding fraudulent financial reports using the Fraud Pentagon model on entities listed on the IDX in the manufacturing sector. The indicators used were pressure (financial targets, financial steadiness, and outer pressure), opportunity (ineffective supervision and industry characteristics), rationalisation (changes in auditing and justification behaviour), competence (changes of directors), and arrogance (portraits of highest executive officers). The results of this study proved that financial targets and ineffective supervision have a positive influence on the existence of fraudulent financial reporting. Moreover, outer pressure, the character of the industry, changes of auditors, and justification behaviour negatively influence the existence of fraudulent financial reports. Financial steadiness, changes of directors, and portraits of the highest executive officers have no effect on fraud in financial statements.

On firms listed on the IDX specifically in the manufacturing sector, Kusumosari (2020) conducted a study on financial reporting fraud using the Fraud Hexagon model. Pressure (financial targets, financial steadiness, and outer pressure), opportunity (ineffective monitoring and external audit capacity), rationalisation, competence (CEO title), hubris (CEO duality), and collusion were the indicators employed in this study (CEO title, political connections, and state-owned enterprises). According to the findings, financial reporting fraud was positively and significantly influenced by financial aims, financial steadiness, political connections, state-owned firms, ineffective monitoring, rationalisation, and CEO duality. However, there is no relationship between fraudulent reporting and outer pressure, CEO rank, or external audit competence.

Other research using the Fraud Hexagon model was carried out by Sari and Nugroho (2020), who reviewed financial statement fraud on entities listed on the IDX in the manufacturing sector. The variables applied in this study were pressure (financial steadiness, individualised financial needs, outer pressure, and financial targets), capabilities, opportunities (industry characteristics and effective monitoring), rationalisation, arrogance, and collusion. The results of this study proved that individualised financial needs, industry characteristics, arrogance, and collusion determine the existence of financial statement fraud, while financial steadiness, outer pressure, financial targets, capabilities, effective monitoring, and the rationalisation factor had no influence on the existence of financial statement fraud.

Priswita and Taqwa (2019) studied corporate governance’s impact on fraud in financial statements. There were 4 (four) proxies used, including the stock owned by the manager, commissioners, the audit committee, and percentage of institutional shares. The test results concluded that the stock owned by the manager, commissioners, the audit committee, and the percentage of institutional shares had no influence on the chance of fraud in the financial statements. These research conclusions are in line with Kurniawan et al. (2020), who studied the relationship between company governance and earnings management relating to the possibility of financial fraud. The study conclude that stock owned by managers, shares owned by institutions, commissioners, independent commissioners, and audit commissions (which are proxies of governance) did not have a significant impact on fraudulent financial statements.

Sabrina et al. (2020) examined the impact of the connectivity of corporate governance organs, suboptimal monitoring, and earnings management for fraud in financial statements. Governance was measured through 3 (three) parameters, including independent commissioners, independent directors, and audit committees, with the conclusion being that the three variables had no impact on the existence of financial statement fraud. Different conclusions were obtained in research conducted by Wicaksono and Chariri (2015). This study examined governance procedures for financial reporting manipulation opportunities using 4 (four) variables, specifically the number of commissioners, the structure of independent commissioners, the audit committee, and the efficacy of internal audits. The conclusion of the test proved that the audit committee and the efficacy of internal audits have a negative and significant impact on the manipulation of financial statements. Conversely, the number of commissioners and the structure of independent commissioners had no impact on the manipulation of financial statements.
Research related to the role of corporate governance in minimising financial report manipulation was conducted by Mulyadianto et al. (2020). Their research used 3 (three) variables when measuring corporate governance, including the performance of the board of commissioners, the financial skills of the audit committee, and the stock owned by the institution. The findings of this research concluded that the performance of the board of commissioners and the stock owned by the institution had an influence on minimising financial statement fraud, while the financial skills of the audit committee had no influence.

Hidayat (2020) used the ASEAN Corporate Governance Scorecard (ACGS) when measuring corporate governance for fraudulent financial reporting, making non-financial entities listed on the IDX their objects of observation. The result of the study concluded that the principles of governance based on the ACGS, including the obligations of the board, the authority of the stockholders, the fulfillment of the functions of interested parties, the fulfillment of equal rights to stockholders, and disclosure had a positive impact on minimising the chance of fraud in the financial statements.

Agency theory is the main theory referred to in this study. Agency theory defines the bond among stockholders (principals) and managers (agents). When there is an engagement that connects a party (principal) with another party (agent) in carrying out a job for the benefit of stockholders, an agency relationship will arise (Jensen & Meckling, 1976). The relationship that occurs is a delegation of authority for business decision-making in managing and controlling resources from stockholders as principals to management as agents. The existence of a principal and agent relationship will encourage asymmetric information. Information asymmetry is the occurrence of an imbalance of information caused by the position of an agent allowed to acquire more entity-linked knowledge when compared to the knowledge obtained by the principal, potentially creating gaps that trigger the potential for the manipulation of financial statements (Sabrina et al., 2020). The loopholes created provide an opportunity for agents to prioritise on an individual’s behalf by hiding information that should be conveyed to the principal, or by manipulating the information presented in financial statements that have the potential to deceive financial statement readers when making decisions (Nurbaiti & Hanafi, 2017).

Eisenhardt (1989) revealed that there are three things related to human nature which form the basis of agency theory, among others: (1) humans tend to be more concerned with self-interest (self-interest); (2) humans are limited by logical and reasonable thoughts (bounded rationality); and (3) the human tendency to minimise and avoid risk (risk-aversion). The nature factor possessed by humans as individual beings will result in management as agents tending to prioritize individualised goals over company goals, ultimately creating disputes between principals and agents, known as agency problems. According to Jensen and Meckling (1976), agency problems encourage management to act as if they prioritise on the behalf of stockholders. However, management generally acts based on individualised interests. Differences in interests need to be in harmony with contracts that will cause agency costs. Jensen and Meckling (1976), argues that agency costs consist of 3 (three) types: First, Costs associated with estimating, monitoring, and overseeing the acts conducted by the agent that must be covered by the principal (monitoring cost); Second, Costs to be borne by the agent as a result of the agent’s actions to equate the agent behalf with the behalf of the principal (bonding costs); and Third, Costs incurred because the agent cannot fully align their behalf with the principal’s behalf, resulting in a decrease in the principal’s welfare (residual loss).

According to ACFE (2020), fraud is divided into 3 (three) main parts, including corruption, asset misappropriation, and financial statement fraud. Arens et al. (2012) define fraud as intentional financial misstatements. Tuanakotta (2013) interprets fraud as all forms of illegal acts characterised by concealment, violation, or a deception of trust. Pusat Edukasi Antikorupsi KPK (2019) defines fraudulent statements as a form of manipulation of financial statements and non-financial statement in the form of misstatements with overstatement and understatement mechanisms generally manipulated against asset accounts and income accounts in financial statements. Thus, fraudulent acts in financial reporting are actions that violate the law and are included in the scope of corruption.

The Beneish M-Score (FFR) model is used in this research as a proxy for the likelihood of fraud in financial accounts. In the article The Detection of Earnings Manipulation, Beneish (1999)
proposed the M-Score by describing the profile from a manipulating sample company, its distinctive traits, and the suggested model used to identify the chance of manipulation in the entity’s financial report. Beneish uses 8 (eight) characteristics in the M-Score model, namely Days sales in receivables index (DSRI), Gross margin index (GMI), Asset quality index (AQI), Sales growth index (SGI), Depreciation index (DEPI), Sales, general, and administrative expenses index (SGAI), Leverage index (LVGI), and Total accruals to total assets (TATA). If the M-Score obtained is > (-2.22), it indicates the possibility of fraud in the entity’s financial report. If the M-Score obtained is < (-2.22) then there is no indication of the potential of fraud. Beneish’s model cannot determine with certainty whether the report has been manipulated or not, only the probability. A forensic audit examination determines whether the financial statements have already been manipulated. The following is the formula used to obtain the M-Score:

\[ \text{M-Score} = -4.84 + 0.92 \text{ (DSRI)} + 0.528 \text{ (GMI)} + 0.404 \text{ (AQI)} + 0.892 \text{ (SGI)} + 0.115 \text{ (DEPI)} - 0.172 \text{ (SGAI)} + 4.679 \text{ (TATA)} - 0.327 \text{ (LVGI)}. \]

There are 7 (seven) independent variables used in the study, as presented in Table 1.

**Table 1. Independent Variable**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy</th>
<th>Measurement Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>Financial stability</td>
<td>(total Aset t - Total Aset t-1) / (Total Aset t)</td>
</tr>
<tr>
<td>Capability</td>
<td>No change of Directors</td>
<td>Code 1 (one) if the company does not change directors</td>
</tr>
<tr>
<td>Collusion</td>
<td>Sales transactions to related parties</td>
<td>Code 0 (zero) if the company changes directors</td>
</tr>
<tr>
<td>Opportunity</td>
<td>Effective monitoring</td>
<td>Total number of independent commissioners</td>
</tr>
<tr>
<td>Rationalisation</td>
<td>Change of auditor</td>
<td>Code 1 (one) if the company change auditors</td>
</tr>
<tr>
<td>Arrogance</td>
<td>Political connection</td>
<td>Code 0 (zero) if the company does not change auditors</td>
</tr>
<tr>
<td>Corporate governance</td>
<td>Implementation</td>
<td>Compliance with the guidelines for public company governance as regulated in the Circular Letter of the Financial Services Authority Number 32/SEOJK.04/2015</td>
</tr>
</tbody>
</table>

This study was initiated to understand the impact of the independent variables consisting of Pressure (FS), Capability (CoD), Collusion (RPT), Opportunity (EM), Rationalisation (CiA), Arrogance (PC), and Corporate Governance (CG) on the potential existence of fraud in the financial statements (FFR), as the dependent variable. The main model of this research is as follows.

\[ \text{FFR} = \alpha + \beta_1 \text{FS} + \beta_2 \text{CoD} + \beta_3 \text{RPT} + \beta_4 \text{EM} + \beta_5 \text{CiA} + \beta_6 \text{PC} + \beta_7 \text{CG} + \epsilon \]

The implementation of this test was carried out by logistic regression analysis. There are 3 (three) stages in evaluating logistic regression, specifically the overall model feasibility test, the model fit quality level test, and the individual parameter significance test (Widarjono, 2010). In this study, the overall feasibility of the model was carried out by paying attention to the -2LL value against the chi-square table value at a significance level of 5% and the degree of freedom according to the number of independent variables. The next stage is an omnibus test to see the significance of the model coefficients with the aim of seeing a significant effect of the independent variable on the dependent variable. Testing the quality level of the model fit is carried out through the Hosmer and Lemeshow test with the aim of being able to estimate the suitability of the predicted probabilities and the observed probabilities. To decide the effect of the model in explaining the probability of the model to the independent variable, the test is continued by looking at the pseudo r square coefficient. Pseudo r square is measured based on Nagelkerke R Square. The next step is to decide outlier data on the independent variables to avoid unfavourable measurement results. Testing the significance of individual parameters is carried out to determine the degree of significance of the impact of the individual independent variables on the dependent variable.
Result and Discussion

Based on the individual parameter significance test, the facts found in the research results are shown in Table 2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Robust B</th>
<th>Robust Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS</td>
<td>5,321</td>
<td>0,025**</td>
<td>204,573</td>
</tr>
<tr>
<td>CoD</td>
<td>1,013</td>
<td>0,048**</td>
<td>2,753</td>
</tr>
<tr>
<td>RPT</td>
<td>1,584</td>
<td>0,071*</td>
<td>4,872</td>
</tr>
<tr>
<td>EM</td>
<td>-1,362</td>
<td>0,002***</td>
<td>0,256</td>
</tr>
<tr>
<td>CIA</td>
<td>1,442</td>
<td>0,004***</td>
<td>4,320</td>
</tr>
<tr>
<td>PC</td>
<td>-0,569</td>
<td>0,146</td>
<td>0,566</td>
</tr>
<tr>
<td>CG</td>
<td>-0,016</td>
<td>0,489</td>
<td>0,984</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>1,773</td>
<td>0,008***</td>
<td>5,889</td>
</tr>
</tbody>
</table>

-2LL Beg 144,406
-2LL End 102,351
p-value 0,0004
Pseudo R² 29,12%

The research results are based on tests that describe the correlation between the dependent variable and the independent variable:

The Effect of Pressure on the Potential for Fraud in Financial Statements

The test results found that the ratio of changes in entity assets as a proxy for pressure has a positive and significant effect. According to agency theory, it is possible that management has goals that are not aligned with those of stockholders. When there is an engagement that connects the stockholders as the principal, with the management as an agent in carrying out a task for the benefit of the stockholders, it will lead to an agency relationship (Jensen & Meckling, 1976). The relationship is the delegation of business decision-making authority in managing and controlling resources from stockholders to management. This results in management realising the maximum possible profit for the company through performance which will be reflected in the financial statements. This situation will pressure management. State-owned companies and affiliated entities under them as entities whose majority shares are controlled by the government, have different aims and objectives from private companies that prioritise profits for stockholders. According to Law No. 19 of 2003 concerning BUMN, in general, the establishment of BUMN is aimed at contributing to the national economy, particularly state revenues, prioritising profit, providing public benefits through the provision of goods and/or services that are needed by the community, pioneering work that the private sector has not carried out, and assisting communities.

The conclusions of this research are in line with the findings by Annisya et al. (2016); Bawekes et al. (2018); Septriani and Handayani (2018); Wicaksana and Suryandari (2019); Kusumosari (2020); and Sari and Rofi (2020) which state that the ratio of changes in entity assets as a measurement of financial steadiness has a positive and significant influence on the potential for fraud in financial statements.

The Effect of Capability on the Potential for Fraud in Financial Statements

The test results found that the absence of change of directors had a positive and significant impact. Directors can take advantage of their position to influence other people who can determine the occurrence of fraud. Periodic changes of directors are needed to minimise abuse of authority in the long term and improve the performance of previous management (Septriani & Handayani, 2018). According to Law Number 19 of 2003 Concerning BUMN, the Board of Directors is the BUMN institution in charge of topics connected to BUMN's needs and objectives and acts as a representation in relation to legal concerns. Even when the term of office of a director has not yet reached 5 (five) years, a change of director may
still be made using the GMS or EGMS process. In the case of PT Garuda Indonesia, the director (who was in office at the time of the Company’s financial report of the 2018 period being manipulated) was fired from his post in 2019 via a procedure for public companies. In addition, the basic nature factor possessed by humans as individual beings will cause directors to prioritise individualised interests instead of the interests of the Company. This can lead to an impetus for fraud in the Company’s financial statements.

The research findings by Siddiq et al. (2017); Septrian and Handayani (2018); Himawan and Wijanarti (2020) are in line with the conclusions of this study which found that the absence of a change of directors had a positive impact on the chance for fraud in financial statements. However, the findings of this study differ from Bawekes et al. (2018); Agusputri and Sofie (2019); Sari and Nugroho (2020); Mintara and Hapsari (2021). They found that the absence of a change of directors had no impact on the chance for fraud in a company’s financial statements.

**The Effect of Collusion on the Potential for Fraud in Financial Statements**

According to the test results, collusion has a positive and considerable impact on the percentage of sales transactions involving linked parties. Transactions between SOE corporations and SOE linked entities are widespread in state-owned businesses where the government owns the majority of the stock, as shown by the disclosure of transactions to related parties in their financial statements. Young (2005) states that transactions with related parties can increase risk of fraud because it increases management’s involvement in making decisions. The complexity of transactions with related parties can trigger the risk of material misstatements due to the risk of manipulation by management.

The research of Fitri et al. (2019); Sari and Nugroho (2020) are in line with the conclusion found in this research that collusion has a positive and significant influence on the potential for fraud in financial statements. It also shares the conclusion of Young (2005) regarding transactions with related parties being related to fraudulent acts occurring in an entity. However, the findings in this study differ from those of Rachmawati and Marsono (2014); Jaunanda and Silaban (2020), which found that transactions with related parties had no effect on the potential for fraud in financial statements.

**The Effect of Opportunity on the Potential for Fraud in Financial Statements**

Based on the test results, it was found that opportunity proxied by the number of independent commissioners had a negative and very significant effect. One of the efforts which can be undertaken to minimise the possibility of fraud is to limit the opportunities that certain parties can exploit. Effective monitoring will encourage companies to achieve ideal conditions to achieve company goals. However, the ideal situation is not always the same for every company. Ineffective monitoring occurs because the entity’s internal control system do not running well (Agusputri & Sofie, 2019). Following agency theory, ineffective monitoring will create opportunities for a party to realise individualised goals that are not in line with company goals, leading to further agency costs. Skousen et al. (2009) argue that fraud tends to be found in entities that have fewer outer boards of commissioners. All state-owned businesses and affiliated entities that have been registered on the IDX have complied with the minimum number of Independent Commissioners in the composition of the Board of Commissioners following OJK Regulation Number 33 of 2014 concerning Board of Directors and Board of Commissioners of Public Companies.

The results of this research are in line with the findings of Razali and Arshad (2014); Tiffani and Marfuah (2015); Sari and Husadha (2020); Vidella and Afiah (2020), which state that increasing the number of independent commissioners in a company will minimise the potential for fraud in the company financial statements. However, this conclusion is different from the findings of Chandra and Suhartono (2020); Sari and Nugroho (2020), which conclude that the amount of independent commissioners does not have a significant influence on the potential for fraud in financial statements.
The Effect of Rationalisation on the Potential for Fraud in Financial Statements

Based on the test results, it was found that rationalisation proxied through the change of auditors had a positive and very significant effect. Rationalisation is defined as justifying behaviour by fraud actors for actions that have been carried out (Marks, 2011). The external auditor's role is to supervise and examine management's presentation of financial statements. Companies that frequently change auditors are more often interpreted as a manifestation of rationalisation in an effort to erase traces of fraud by previous auditors (Bawekes et al., 2018). In agency theory, agency problems that arise lead to agency costs. One of the agency costs that occur is stockholders bearing the costs of measuring, observing, and controlling the actions taken by management (monitoring costs). As a result, agency theory serves as the foundation for implementing quality audits by stockholders through the expenditure of monitoring fees, with the expectation that management behaviour will continue to align with stockholder interests. The manipulation of the financial accounts of the state-owned corporation PT Garuda Indonesia Tbk in the 2018 fiscal year is one example of a case that has garnered public attention. According to the historical annual reports made public on the company's official website, there was always a change of external auditors in the years prior to and following 2018.

The results of this research in line with the conclusions of Loebbecke et al. (1989), Saputra & Kesumaningrum (2017); Rahayu (2020); Mintara and Hapsari (2021), who found that rationalisation proxied through the change of external auditors had a significant impact on the potential for fraud in financial statements. Traces of fraud that can be found by previous auditors, as well as the motivation to cover up real information, can be hidden through a change of auditors. However, this finding is not in line with the conclusions of Bawekes et al. (2018); Agusputri and Sofie (2019); Rusmana and Tanjung (2019); Sari and Nugroho (2020), which found that there are no significant effects of auditor turnover on the potential for fraud in financial statements.

The Effect of Arrogance on the Potential for Fraud in Financial Statements

Based on the test results, it was discovered that political connections, which are used to gauge arrogance, had no discernible impact on the likelihood of financial statement fraud. This is because the existence of political connections in the executive, legislative, and judicial sectors encourages someone who has a position to further increase the attitude of responsibility towards the position that has been entrusted. This is especially due to the supervision factor and attention given by the community, which become more intense if there is a practice that is not suitable. This is supported by the widespread practice of concurrent positions in the government, especially commissioners, which is still common. In accordance with BUMN Ministerial Regulation Number 10 of 2020 regarding the terms and procedures for the appointment and dismissal of members of the Board of Commissioners and the Supervisory Board, there is no prohibition against holding positions in the government.

This is in line with the research of Sai (2013), Jullani et al. (2020), Kartikawati et al. (2020), and Sabrina et al. (2020) who found that political connections did not have a significant impact on the potential for fraud in financial statements. However, the findings of this study are not in line with the findings of Stuart and Wang (2016); Matangkin et al. (2018), which found that political connections have a positive and significant impact on the potential for fraud in a company's financial statements. The existence of differences in the direction of research results related to political connections is an interesting matter requiring further study.

The Effect of Governance on the Potential for Fraud in Financial Statements

Testing revealed that the chance for fraud in financial statements was not significantly impacted by governance, as determined by the percentage of open entity governance suggestions that were implemented in accordance with SE OJK Number 32 of 2015. The disclosure of compliance with the recommendations of public company governance by the OJK, which is directive and explanatory, is what prevents the implementation of governance from having any impact on the chance for fraud in a company's financial statements. This is because there are entities that have not simultaneously followed the directives. Entities are required to put into practice the
recommendations made for adopting the facets and tenets of the Governance Guidelines that correspond to their requirements and/or circumstances. The entity must explain the reasons why any implementation of the recommendations has not been carried out in accordance with the Governance Guidelines, if the Governance Guidelines' recommendations are not yet appropriate given the circumstances. Alternately, the entity may provide additional strategies for putting the Governance Guidelines' features and tenets into practice. The Minister of BUMN Regulation Number 1 of 2011 about the Implementation of Good Corporate Governance in BUMN also contains specific regulations on good governance for BUMN enterprises. There is no mechanism for evaluating the appropriateness of the application because the entity only states that it has followed or not followed the guidelines, unaccompanied by additional explanations, which makes the application of governance have no effect on the potential for fraud in an entity's financial statements. While the application of the criteria often takes into account the industry, sector, and the volume and complexity of an entity, another factor is the range of sample characteristics employed in this study. This is in line with the findings of Priswita and Taqwa (2019); Kurniawan et al. (2020); Sabrina et al. (2020); Guritno et al. (2020); Nursiam and Ghaisani. In contrast, the studies by Widodo and Syafruddin (2017); Yasmin et al. (2020); Mulyadiyanto et al. (2020); Hidayat (2020), reached different outcomes, concluding that corporate governance has a detrimental effect on the possibility of fraud in a company's financial statements.

Conclusion

According to the findings of this study, pressure significantly and favourably affects the possibility of financial statement fraud. Positive direction suggests that there is a tendency for financial statement fraud to increase when the ratio of asset changes rises. Additionally, the establishment of BUMN and linked entities with different goals and objectives from private enterprises may put more pressure on management.

Capabilities have a positive and significant impact on the possibility of financial statement fraud. The positive trend suggests that the possibility of financial statement fraud tends to grow when there isn’t a change in the board of directors. The GMS and EGMS methods can be used to replace directors in BUMN corporations and connected entities even if their terms of office have not yet reached 5 (five) years. Changing the Board of Directors on a regular basis is required to prevent long-term abuse of power and to enhance the effectiveness of the previous administration.

Collusion significantly and favourably affects the likelihood of financial statement fraud. The company’s tendency to conduct more sales transactions with connected parties is indicated by the positive direction, which raises the risk of financial statement fraud. Additionally, BUMN corporations occasionally engage in business with BUMN associated entities, as shown by the disclosure of transactions with related parties, which raises the possibility of fraud.

Opportunity significantly and negatively affects the possibility of financial statement fraud. The negative trend suggests that the possibility of fraud in a company's financial statements will decrease as the number of independent commissioners increases. According to OJK Regulation Number 33 of 2014 about Directors and Board of Commissioners of Issuers or Public Companies, all BUMN companies and affiliated entities registered on the IDX have met the requirement for the minimum number of Independent Commissioners in the composition of the Board of Commissioners.

The possibility of financial statement fraud is significantly and favourably impacted by rationalisation. The positive trend suggests that the possibility of financial statement fraud tends to rise as auditor turnover does. The frequency and intensity of auditor change in BUMN corporations and BUMN-related entities tend to be signs that management is attempting to cover up past auditors’ malfeasance.

It has been established that arrogance has little or no impact on the likelihood of fraud in the financial statements of BUMN corporations and BUMN-affiliated entities. This happens because
the existing regulations do not specifically regulate the prohibition of concurrent positions in the
government, so it is still common and has become a public concern in several cases.

It has been established that the likelihood of fraud in the financial statements of BUMN
enterprises and BUMN-affiliated entities is not significantly impacted by good corporate
governance. This is because the disclosure of compliance with the recommendations for public
company governance by the OJK is directive and explanatory, and there is no mechanism to
evaluate the accuracy of the implementation of public entity governance.

The use of the sample in this study is restricted to state-owned enterprises and affiliated
entities listed on the IDX, a total of 21 companies according to the sample criteria within the period
of 2016 to 2020. In addition, this study only utilizes secondary data without the help of other data
collection methods so that it is possible that there are differences with real conditions in the field
according to the characteristics of the company. The use of a financial information database
containing numbers from the financial statements limits the study's ability to detect fraud in the
financial statements to the M-Score, which approximates the calculation's outcome.

For further research, it is hoped that a sample of all state-owned companies in Indonesia can
be used. Further research can also use different measurement proxies on the dependent and
independent variables so that they can capture phenomena from different perspectives. Additional research can use indicators that were not included in this study to reach additional
conclusions and can combine quantitative and qualitative methodologies to more fully represent
field phenomena.

References
ACFE. (2020). Report to the nations on occupational fraud and abuse: 2020 global fraud study. In
Association of Certified Fraud Examiners (ACFE).


pelaporan keuangan: kepemilikan institusional sebagai variabel moderating. Jurnal

Agusputri, H., & Sofie, S. (2019). Faktor - faktor yang berpengaruh terhadap fraudulent financial
reporting dengan menggunakan analisis fraud pentagon. Jurnal Informasi, Perpajakan,

menggunakan fraud diamond. Jurnal Bisnis Dan Ekonomi (JBE), 23(1), 72–89.

https://aclc.kpk.go.id/materi/berpikir-kritis-terhadap-korupsi/buku/modul-materi-
tindak-pidana-korupsi


terhadap fraudulent financial reporting (studi empiris pada perusahaan yang terdaftar di
114–134.


Chandra, N., & Suhartono, S. (2020). Analisis pengaruh fraud diamond dan good corporate
governance dalam mendeteksi kemungkinan terjadinya fraudulent financial statement.
Jurnal Bina Akuntansi, 7(2), 175–207. https://wiyatamandala.e-
journal.id/JBA/article/view/93

Cressey, D. R. (1953). Other people's money: a study of the social psychology of embezzlement. Free
Press.


Marks, J. (2011). Why the fraud triangle is no longer enough. In Crowe Horwath LLP.


