The Influence of Fraud Hexagon Theory on Detecting Fraudulent Factors in Financial Reports of State-Owned Companies Listed on the IDX 2018-2022

Dina Aulia1, Masrullah1, Sitti Zulaeha1
1Muhammadiyah University of Makassar
e-mail Corespondensi: dina24289@gmail.com

ABSTRACT

Kecurangan laporan keuangan merupakan paradigma yang sering terjadi di Indonesia dan menimbulkan banyak kerugian. Oleh karena itu, tujuan penelitian ini adalah untuk mendeteksi munculnya potensi kecurangan dalam laporan keuangan dengan menggunakan teori hexagon Fraud. Dalam teori hexagon Fraud, terdapat enam faktor dominan yang dapat memicu terjadinya kecurangan dalam laporan keuangan: tekanan, peluang, rasionalisasi, kemampuan, arogansi, dan kolusi. Tekanan diprosikan dengan target finansial, stabilitas finansial, dan kebutuhan finansial; peluang ini ditentukan oleh sifat industri dan pemantauan yang tidak efektif; rasionalisasi diprosikan dengan pergantian auditor sebagai proksi kemampuan menjadi dan pergantian direktur; arogansi ditunjukkan oleh koneksi politik dan banyaknya CEO; dan kolusi diwakili oleh proyek-proyek dengan pemerintah. Dalam penelitian ini variabel dependen diukur dengan menggunakan model Jones. Teknik purposive sampling digunakan dalam penelitian ini guna memperoleh sampel populasi dengan kriteria perusahaan BUMN yang terdaftar di Bursa Efek Indonesia selama 5 tahun terakhir yaitu 2018–2022. Metode kuantitatif didukung dengan teknik analisis regresi berganda dengan menggunakan alat analisis SPSS 26 dalam penelitian ini. Hasil penelitian menunjukkan bahwa variabel target keuangan, stabilitas keuangan, kebutuhan finansial pribadi, sifat industri, pengawasan yang tidak efektif, pergantian auditor, pergantian direktur, dan koneksi politik tidak mempunyai pengaruh terhadap potensi kecurangan laporan keuangan. Seringnya foto CEO dan proyek kolaborasi dengan pemerintah berpengaruh positif dan signifikan terhadap potensi kecurangan laporan keuangan.

Kata Kunci : Fraud, Laporan Keuangan, Fraud Hexagon

ABSTRACT

Financial statement fraud is a paradigm that often occurs in Indonesia and causes many losses. Therefore, the aim of this research is to detect the emergence of potential fraud in financial reports using the hexagon fraud theory. In the hexagon fraud theory, there are six dominant factors that can trigger fraud in financial reports: pressure, opportunity, rationalization, ability, arrogance, and collusion. Pressure is proxied by financial targets, financial stability, and financial need; opportunity is proxied by the nature of industry and ineffective monitoring; rationalization is proxied by a change auditor as a proxy for capability to become and change in director; arrogance is proxied by political connections and the frequent number of CEOs; and collusion is proxied by projects with the government. In this research, the dependent variable is measured using the Jones model. The purposeful sampling technique was used in this research in order to obtain a population sample with the criteria of state-owned companies listed on the Indonesia Stock Exchange during the last 5 years, namely, 2018–2022. The quantitative method is supported by multiple regression analysis techniques using the SPSS 26 analysis tool in this research. The results of this research show that the variables financial target, financial stability, personal financial need, nature of industry, ineffective monitoring, change in auditor, change in directors, and political connection have no influence on the potential for fraudulent financial statements. Frequent CEO pictures and collaboration projects with the government have a positive and significant effect on the potential for fraudulent financial statements.

Keywords: Fraud, Financial Reports, Fraud Hexagon

INTRODUCTION

Many companies carry out Initial Public Offering (IPO) on the Indonesian Stock Exchange (BEI) throughout 2019 as many as 55 companies, bringing the number of companies listed on the Indonesian capital market to 668 companies.(Rosana, 2019). However, this is not accompanied by
adequate control. This is proven by the fact that there are many cases of cheating or fraud that occur. The types of fraud consist of corruption, investment fraud, asset misappropriation and fraud. Financial reporting (fraudulent statements) (ACFE (Association of Certified Fraud Examiners), 2019).

Fraud cases that occur need to be studied in depth as to what causes the fraud cases to occur. There are several ways to detect the causes of fraud cases that occur, namely by using a fraud theory approach. The first fraud theory is, fraud triangle, fraud pentagon, fraud diamond.

Further research was carried out by Sari & Nugroho, (2020) regarding Financial Statements Fraud with Vousinas fraud hexagon model approach: review of public companies in Indonesia with variables: financial stability, personal financial need, external pressure, financial target, capability, nature of industry, effective monitoring, rationalization ego/arrogance and collusion. The results of this research are stimulus factors in terms of personal financial need, opportunity factors in terms of nature of industry, ego (arrogance) and collusion which influence financial report fraud. Other factors are: stimulus factors in terms of financial stability, external pressure and financial targets; capability factor; opportunity factors in terms of effective monitoring; and rationalization has no effect on financial statement fraud.

The research that will be carried out uses fraud hexagon theory. The reason for using this theory is because this theory is the latest theory in revealing fraud committed by companies. This fraud hexagon is expected to reveal fraud that occurs in financial reports in a company because there is an additional component, namely collusion, which was not previously found in the previous fraud theory. In connection with the description above, researchers are interested in conducting research entitled "The Influence of Fraud Hexagon Theory on Detecting Fraudulent Factors in Financial Reports in State-Owned Companies Listed on the IDX 2018-2022”

**METHOD**

**Types of research**

This research uses descriptive research with a quantitative approach. The data used in this research is secondary data, namely data not obtained directly from the institution concerned. The secondary data source used is the annual report in the form of state-owned company reports published and listed on the Indonesia Stock Exchange (BEI) in 2019-2021.

**Population and sample**

The population in this research are state-owned companies registered on the IDX during the 2018-2022 period. The sample in this study used a purposive sampling method. The criteria used in this research are explained in table 1.

**Table 1. Table of research sampling criteria**

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>State-owned companies registered on the IDX during 2018-2022</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td>State-owned companies that did not issue a complete annual report during the observation year</td>
<td>(16)</td>
</tr>
<tr>
<td>3</td>
<td>BUMN companies that have ceased to be BUMN companies during 2018-2022</td>
<td>(0)</td>
</tr>
<tr>
<td>4</td>
<td>State-owned companies that do not present complete data required for observation and complete publication for the 2018-2022 period</td>
<td>(0)</td>
</tr>
</tbody>
</table>

The number of samples used in the research and meeting the criteria = 7

Number of analysis units = 7 x 5 = 35

Total observation data for 2018-2022 (7 x 5 years) = 35

**Source:** Research Data, 2023

**Data collection technique**

This research uses descriptive research with a quantitative approach. The data collection technique in this research uses non-participant observation, because data is collected by conducting searches and then the information collected will be recorded. The data in this research were
obtained from the Indonesian Stock Exchange website (www.idx.co.id) in the form of the company's annual report for the 2018-2022 period. The data obtained will then be calculated to measure the value of the variables used in this research. As a data processing tool using SPSS 26.

**Variables and Operational Definitions**

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable Name</th>
<th>Operational definition</th>
<th>Measurements and Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Financial statement fraud</td>
<td>The level of manipulation or omission of a value in a financial report</td>
<td>Earnings management (modified Jones model) $DA_t = - NDA_{t-1}$ (Siddiq et al., 2017)</td>
</tr>
<tr>
<td>2.</td>
<td>Financial targets</td>
<td>Determining targets that must be achieved by management as a measure of good company performance.</td>
<td>$ROA_t = \frac{Net\ Income_t}{Total\ of\ Assets_t}$ (Soelung et al., 2021)</td>
</tr>
<tr>
<td>3.</td>
<td>Financial stability</td>
<td>An overview of the financial condition of a company</td>
<td>$ACHANGE_t = \frac{Total\ Asset_t - Total\ Asset_{t-1}}{Total\ asset_{t-1}}$</td>
</tr>
<tr>
<td>4.</td>
<td>Financial need</td>
<td>Financial condition is important in a company</td>
<td>$OSHIP = \frac{Stock\ owned\ by\ other\ institutions}{Spreading\ stock}$ (Wicaksana &amp; Suryandari, 2019)</td>
</tr>
<tr>
<td>5.</td>
<td>Nature of industry</td>
<td>A description of the ideal conditions that a company wants to achieve.</td>
<td>Receivables $= \frac{Receivable(t)}{Sales(t)} - \frac{Receivable(t-1)}{Sales(t-1)}$ (Faradiza, 2019)</td>
</tr>
<tr>
<td>6.</td>
<td>Ineffective monitoring</td>
<td>Ineffective supervision carried out by the person responsible for performance management in the company.</td>
<td>$IND = \frac{Jumlah\ dewan\ komisaris\ independent}{Total\ dewan\ komisaris}$ (Kurnia &amp; Anis, 2017)</td>
</tr>
<tr>
<td>7.</td>
<td>Change auditor</td>
<td>Substitute auditor in the company</td>
<td>Dummy variables, a value of 1 if you have ever replaced a KAP during 2019-2021, and a value of 0 if you have never replaced a KAP during 2019-2021. (Apriliana &amp; Agustina, 2017)</td>
</tr>
<tr>
<td>8.</td>
<td>Change in director</td>
<td>Replacement of the board of</td>
<td>Dummy variables, value 1 if you have ever replaced the board of directors during 2019-2021, and value 0</td>
</tr>
</tbody>
</table>
9. **Political connections**

<table>
<thead>
<tr>
<th>directors</th>
<th>Political relationships built by companies with third parties.</th>
</tr>
</thead>
</table>

- *Dummy variables* value of 1 (one) for a company whose CEO or board of commissioners has political relations during the 2019 - 2021 period, and a value of 0 (zero) when the CEO or board of commissioners in the company does not have political relations during the 2019 - 2021 period. (Tessa & Harto, 2016)

10. **Frequent number of CEO's picture**

<table>
<thead>
<tr>
<th>Dummy variables</th>
<th>Number of times the CEO's photo appears in the company's annual report.</th>
</tr>
</thead>
</table>

- See the number of CEO photos displayed in the annual report in 2019-2021 (Siddiq et al., 2017)

11. **Projects with the Government**

<table>
<thead>
<tr>
<th>Dummy variables</th>
<th>Government-affiliated companies.</th>
</tr>
</thead>
</table>

- Value 1 if the company is a government-owned company and value 0 for a company not owned by the government. (Sagala & Siagian, 2021)

**Source:** Google Scholar

**Data analysis method**

**Descriptive statistics**

*Statistics* describes a descriptive or explanatory analysis of a data set consisting of mean, median, sum, standard deviation, minimum and maximum values, range, smoothness and kurtosis. (Ghozali, 2018).

**Classic assumption test**

Classical assumptions are to detect possible deviations from classical assumptions in the multiple regression equations used. In the classical acceptance test itself, there are three tests most commonly used, namely the normality test, heteroscedasticity test and multicollinearity test. (Ghozali, 2016).

**Normality test**

Normality is used to determine whether the data collected and processed has residual values with a normal distribution or not. This study uses the Kolmogorov-Smirnov test, which shows that the data is normally distributed if the residuals in this study have a significance value greater than 0.05 or greater than 5%. (Ghozali, 2018).

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Test This heteroscedasticity aims to obtain information whether the residual variance is the same or not. (Gunawan, 2005). The Glejser test results show that the significance value is greater than 0.05, so heteroscedasticity does not occur, so the regression model has good value. (Ghozali, 2018).

**Multicollinearity Test**

Test This multicollinearity looks for correlation between independent variables from the results of the regression model test. The multicollinearity test was tested using variance inflation factor (VIF) and tolerance. If the tolerance value is smaller than 0.10 or the VIF value is greater than 10 then multicollinearity does not occur. If the tolerance value is greater than 0.10 or the VIF value is less than 10, then multicollinearity is detected.

**Multiple Regression Analysis**

Testing hypotheses in this research through multiple regression analysis using the SPSS analysis tool. For analysis, multiple regression analysis was carried out to find out what influence the dependent variables have (Ghozali, 2018).

**Coefficient of Determination Test (R²)**
If the R2 value is close to 1 (one), meaning the independent variable (x) provides almost all the information needed to predict variations in the dependent variable (y). However, when the R2 value approaches zero (zero), then the independent variable (x) is less able to explain the dependent variable (y) (Ghozali, 2018).

**Regression Model Feasibility Test (F Test)**

Mark the significance of this test is 0.05, if the significance value is less than 0.05 then the model used is declared acceptable or acceptable. Conversely, if the significance value is greater than 0.05 then the model is declared invalid and unhealthy (Ghozali, 2018).

**T test**

If the significance value is less than 0.05 then it is accepted because the research independent variable can influence the dependent variable. If the significance value is greater than 0.05 then it is rejected because the independent variable has no influence on the dependent variable. \( H_o \neq H_1 \) (Ghozali, 2018).

**RESULTS AND DISCUSSION**

Multiple linear regression analysis was used to test the hypothesis in the research. In this test, you can find out whether there is a possible relationship between the dependent variable, namely financial statement fraud, and the independent variable in this research, namely fraud hexagon theory. The results of the multiple linear regression analysis test are in table 3.

**Table 3. Results of multiple linear regression analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>18,311</td>
<td>5,967</td>
<td>3,069</td>
<td>.005</td>
</tr>
<tr>
<td>X1</td>
<td>.353</td>
<td>.312</td>
<td>.253</td>
<td>1,132</td>
</tr>
<tr>
<td>X2</td>
<td>-7.42</td>
<td>2,638</td>
<td>-.051</td>
<td>-2.81</td>
</tr>
<tr>
<td>X3</td>
<td>-2620.095</td>
<td>3592.467</td>
<td>-.112</td>
<td>-7.29</td>
</tr>
<tr>
<td>X4_LN</td>
<td>-.343</td>
<td>.292</td>
<td>-.283</td>
<td>-1.174</td>
</tr>
<tr>
<td>X5</td>
<td>-4,492</td>
<td>7,837</td>
<td>-.139</td>
<td>-5.73</td>
</tr>
<tr>
<td>X6</td>
<td>-.215</td>
<td>1,727</td>
<td>-.017</td>
<td>-1.25</td>
</tr>
<tr>
<td>X7</td>
<td>-.634</td>
<td>1,523</td>
<td>-.054</td>
<td>-4.17</td>
</tr>
<tr>
<td>X8</td>
<td>3,736</td>
<td>2,347</td>
<td>.253</td>
<td>1,592</td>
</tr>
<tr>
<td>X9</td>
<td>-2.641</td>
<td>.992</td>
<td>-.448</td>
<td>-2.662</td>
</tr>
<tr>
<td>X10</td>
<td>6.426</td>
<td>2,521</td>
<td>.545</td>
<td>2.549</td>
</tr>
</tbody>
</table>

\( a. \) Dependent Variable: Y_LN

Source: Processed Data, 2023

Based on the table above, it is the result of multiple linear analysis tests. So, the formulation carried out for the regression equation in this research is formulated as follows:

\[
DAt = 18,311 + 0.353 \times X1 + (-0.742) \times X2 + (-2620.095) \times X3 + (-0.343) \times X4 + (-4.492) \times X5 + (-0.215) \times X6 + (-0.634) \times X7 + 3,736 \times X8 + (-2.641) \times X9 + 6.426 \times X10
\]

The conclusion that can be drawn from the results of the multiple linear regression analysis test is that the constant in this study has a positive constant value of 18,311, then if the values are X1 (financial target), X2 (financial stability), X3 (personal financial need), X4 (nature of industry), X5 (ineffective monitoring), X6 (change in auditor), X7 (change in directors), X8 (political connection), X9 (frequent number of CEO's and So the dependent variable (Y) in this study has a value of 18,311.

The first independent variable in this research, namely financial target, has a B value of 0.353 with a significance value of 0.269, which means that 0.269 > 0.05, so H1 is rejected. It can
be concluded that the independent variable financial target has no influence on the potential for fraudulent financial statements.

Many things can cause high and low ROA figures in a company, so not all increases and decreases in a company's ROA have the potential to give rise to fraud in financial reports. There is justification for the high ROA value of a company by a manager, because the manager feels capable of meeting this high target.

The results of this research are in line with and support the research successfully carried out by Hartadi (2022) and Sari & Nugroho, (2020) with the statement that the independent variable financial target has no influence on the potential for fraudulent financial statements.

The independent variable financial stability has a B value of -0.742 and a significance value of 0.781, which means that 0.781 > 0.05, so H2 is rejected. It can be interpreted that the financial stability variable does not have a positive and significant influence on the potential for fraudulent financial statements.

This shows that each company has the same asset growth tendency, even though fraud companies have a lower value, this variable still cannot differentiate between fraud companies and non-fraud companies. Looking at the test results in this research, the value of changes in assets owned by fraud companies and non-fraud companies tends to be the same. The high or low financial stability of the company in this case does not cause management to automatically commit fraud to increase the stability of the company.

The results of this research are in line with and support the research successfully carried out by Hartadi (2022) with the statement that the independent variable financial stability has no influence on the potential for fraudulent financial statements.

The independent variable personal financial need has a B value of -2620.095 and a significance value of 0.473, which means that 0.473 > 0.05, so H3 is rejected. This means that the independent variable personal financial need has no influence on the potential for fraudulent financial statements.

This means that the more the company's internal owners do not depend on their personal financial needs on the company's assets, the greater the potential for fraudulent financial reporting practices.

The results of this research are in line with and support research that has been successfully carried out by Kayoi & Fuad, 2019 which states that personal financial need has no influence on the potential for fraudulent financial statements.

The independent variable nature of industry has a B value of -0.343 and a significance value of 0.252, which means that 0.252 > 0.05, so H4 is rejected. This shows that the independent variable nature of industry has no effect on the potential for fraudulent financial statements.

Accounts receivables that are successfully collected will certainly change the condition of a company, especially increasing the amount of cash it has so that it can reduce the percentage of potential fraud in financial statements due to the pressure that arises because some of the company's operational needs cannot be met. So, the nature of industry has no influence on the potential for fraudulent financial statements.

The results of this research are in line with and support research that has been successfully carried out by Dewi & Yulianti, 2020 which states that the nature of industry has no effect on the potential for fraudulent financial statements.

The independent variable ineffective monitoring has a B value of -4.492 and a significance value of 0.572, which means that 0.203 > 0.05, so H5 is rejected. It can be interpreted that the independent variable ineffective monitoring has no influence on the potential for fraudulent financial statements.

This insignificant result indicates that the level of ineffective monitoring does not cause companies to commit acts of fraud in the company's financial reports. Having ineffective monitoring by an independent board of commissioners who come from outside the company will not necessarily increase the effectiveness of supervising management to prevent fraudulent financial reports.
The results of this research are consistent and in line with research successfully conducted by Sagala & Siagian, 2021 which states that ineffective monitoring has no influence on the potential for fraudulent financial statements.

The independent variable change in auditor has a B value of -0.215 and a significance value of 0.902, which means that 0.902 > 0.05, so H6 is rejected. This means that the independent variable change in auditor has no influence on the potential for fraudulent financial statements.

The change of auditor probably occurred not because the company wanted to reduce the detection of fraudulent financial reporting by the old auditor, but because the company wanted to comply with Minister of Finance Regulation No. 17/PMK.01/2008 article 3 paragraph 1 which states that providers of general audit services for the financial reports of an entity can be carried out for 6 consecutive financial years by the same KAP and 3 consecutive financial years by the same auditor for the same client.

The results of this research are in line and consistent with research that has been successfully carried out by Sagala & Siagian, 2021 and Dewi & Yulianti, 2020 with the statement that the independent variable change in auditor has no influence on the potential for fraudulent financial statements.

The independent variable change in directors has a B value of -0.634 and a significance value of 0.681, which means that 0.681 > 0.05, so H7 is rejected. This means that the independent variable change in directors has no positive and significant effect on the potential for fraudulent financial statements.

The longer a director holds a position in a company, the more experience and personal knowledge he or she has when in the workplace. The increased knowledge and personal experience he has gained will strengthen the level of effectiveness and efficiency of the performance he will carry out. So, the results of this study show that change in director has no influence on financial statement fraud. This shows that when a director has a term of office that tends to be shorter or shorter, it will actually increase the percentage of fraud occurring in financial reports.

The results of this research are in line and consistent with research successfully conducted by Nadziliyah & Primasari (2022) which states that the change in director has no influence on the potential for fraudulent financial statements.

The independent variable political connection has a B value of 3.736 and a significance value of 0.124, which means that 0.124 > 0.05, so H8 is rejected. This means that the independent variable political connection does not have a positive and significant influence on the potential for fraudulent financial statements.

The existence of political connections between the directors of a company will give rise to several negative attitudes. Some directors may take advantage of the privileges they receive, such as the ease of obtaining loans to support the continuity of the company. Of course, the political connections that several directors in the company have will make relationships with third parties outside the company easier because of these connections. However, some of the privileges that are obtained from political connections will have great risks, because of course they are not free.

The results of this research are in line with and support the research successfully carried out by Dewi & Yulianti, 2020 which stated that political connections do not have a positive influence on the potential for fraudulent financial statements.

The independent variable frequent number of CEO's has a B value of -2.641 and a significance value of 0.014, which means that 0.014 < 0.05, then H9 is accepted. This means that the independent variable frequent number of CEO's has a positive and significant influence on the potential for fraudulent financial statements.

The greater the number of CEO photos displayed in a report can indicate the high level of CEO arrogance in the company. A high level of arrogance can lead to fraud because the arrogance and superiority of a CEO can make the CEO feel that any internal control will not apply to him because of his status and position.

The results of this research are in line and consistent with research successfully conducted by Dewi & Yulianti (2020) which states that the frequent number of CEO's picture has a positive effect on the potential for fraudulent financial statements.
The independent variable Cooperation with the government project has a B value of 6.426 and a significance value of 0.018, which means that 0.018 < 0.05, so H10 is accepted. This means that the independent variable of the Collaboration project with the government has a positive and significant influence on the potential for fraudulent financial statements.

The larger the scale of the cooperation project carried out by the company with the government, the greater the company's financial receipts will be. The large financial income from government project collaboration will trigger management to take advantage by manipulating the company's financial reports.

The results of this research are in line and consistent with research successfully conducted by Aviantara (2021) which states that collaboration projects with the government have a positive effect on the potential for fraudulent financial statements.

CONCLUSION

This research aims to empirically prove the influence of pressure which is proxied by financial targets, financial stability and financial need, opportunities which are proxied by the nature of industry and ineffective monitoring, rationalization which is proxied by change, auditor, ceo tenure as a proxy for capability (capability) is proxied by being and change in director, arrogance is proxied by political connections and frequent number of ceo's picture and collusion is proxied by projects with the government regarding fraudulent financial reports in listed state-owned companies on the Indonesian Stock Exchange 2018-2022. Based on the analysis that has been successfully carried out, the conclusions that can be drawn are that financial target, financial stability, personal financial need, nature of industry, ineffective monitoring, change in auditor, change in directors, and political connection have no influence on the potential for fraudulent financial statements. Meanwhile, the frequent number of CEO's pictures and collaboration projects with the government have a positive and significant effect on the potential for fraudulent financial statements. The number of samples that can be used for further research, it is recommended to use more samples and focus on specific similar industries. Such as pharmaceutical, industrial, banking or manufacturing companies. In future research, you can use or add other proxies to measure the fraud hexagon theory so that the research results become more diverse.

REFERENCES


