

## Determinants of Financial Statement Fraud Using the Fraud Hexagon Theory Approach

Sri Dwiningsih<sup>1</sup>, Alfiah<sup>2</sup>, Muhammad Faizal Firdaus<sup>3</sup>

Sekolah Tinggi Ilmu Ekonomi Kertanegara Malang, Indonesia<sup>123</sup>

Corresponding Author : Sri Dwiningsih (sri\_dwi76@yahoo.com)

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### Abstract

This research was conducted to analyze and determine the effect of financial stability, external pressure, supervision, change of auditors, change of directors, arrogance and collusion from the Fraud Hexagon Theory approach to fraudulent financial statements. The sample of this study were 20 state-owned companies listed on the IDX from 2017 to 2021. The data collection technique used was the documentation method. Data analysis techniques using Descriptive Statistical Analysis, Partial Test (t test) and Simultaneous Test (F Test). The results of the research are based on the results of calculations and analysis of the variables of financial stability, external pressure, supervision, changes in directors, arrogance and collusion have no effect on fraudulent financial statements, while auditor turnover variables have an effect on fraudulent financial statements.

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## INTRODUCTION

Company financial reports are very important to get a positive corporate image (Nadziliyah & Primasari, 2022). Financial reports must present correct and accurate information without any crime in the form of fraud so that no one feels disadvantaged and users of financial reports can use it in making decisions (Octaviana, 2022).

Financial reports are also required to always be neutral and impartial to personal interests and adjusted to the SAK that has been made (Apriliana & Agustina, 2017). However, in reality, not all company management realizes the importance of a clean and fraud-free report (Lionardi & Suhartono, 2022). Companies tend to commit fraud with the aim that the company's performance looks optimal in the eyes of stakeholders. One way to cover up the company's unfavorable condition is by presenting information that is not in accordance with actual conditions (Purnama et al., 2022).

Fraud is fraud that is intentionally carried out by violating several existing rules to gain personal gain (Mardianto & Tiono, 2019). Financial statement fraud is a problem that cannot be ignored, because fraud can cause losses to the company or related external parties. Fraud detection in financial reports is necessary to prevent losses caused by fraud (Sukmadilaga et al., 2022). The theory used in this research is the fraud hexagon theory. The hexagon fraud theory is the newest theory in detecting fraud and a refinement of previous fraud theories (Jannah et al., 2021). The elements in the fraud hexagon consist of stimulus, opportunity, rationalization, capability, ego, and collusion (Vousinas, 2019).

Financial statement fraud in this study is focused on the problems experienced by State-Owned Enterprises (BUMN). BUMN is a form of corporate business that is under the auspices of the government to carry out government functions as agents of economic development (Hildayani & Serly, 2021). However, in practice, fraudulent acts are still found in BUMN and this is not in accordance with the applicable laws and regulations. The existence of cases of fraudulent financial reports in SOEs is of course detrimental to state finances and detrimental to many parties, especially the welfare of the community and can damage the integrity of the company and the image of the country (Hildayani & Serly, 2021).

Several studies have proven that financial stability, external pressure, supervision, change of auditors, change of directors, arrogance and collusion from the Fraud Hexagon Theory approach have an effect on fraudulent financial statements, but some have no effect. Previous research also showed inconsistent results, this study will re-examine the effect of financial stability, external pressure, supervision, change of auditors, change of directors, arrogance and collusion from the Fraud Hexagon Theory approach to fraudulent financial statements in 20 state-owned companies listed on IDX 2017 to 2021.

## METHODS

The data used in this study are company data of 20 state-owned companies listed on the Indonesia Stock Exchange (IDX) for the period 2017 to 2021. The IDX was designated as the research location because researchers considered the IDX as a place to obtain the necessary data in the form of financial reports that were sampled in this research.

This research is located on the Indonesia Stock Exchange (IDX) by downloading the company's annual financial report at the website address [www.idx.co.id](http://www.idx.co.id). The population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions drawn. The population of this study are companies that are on the Indonesian Stock Exchange. The sample is part of the number and characteristics possessed by the population. According to (Sugiyono, 2004:80), the sampling technique in this study was to use purposive sampling. Purposive sampling is a sampling technique with certain considerations. As a sample company data, 20 state-owned companies listed on the Indonesia Stock Exchange (IDX) for the period 2017 to 2021. This study uses the Descriptive Statistical Analysis method, Partial Test (T test) and Simultaneous Test (F Test).

## RESULTS AND DISCUSSION

Descriptive statistics in this study are a description of the data that can provide an overview of the data used in the research. The following are the results of processing descriptive statistical data:

**Table 1 Descriptive Statistical Test Results**

	KLK	SK	TE	PTE	PA	PD	ARO	KL
<i>Mean</i>	0.280 000	0.125 088	0.6720 35	0.4309 48	0.240 000	0.8300 00	4.8000 00	1.810 000
<i>Median</i>	0.000 000	0.081 027	0.7237 00	0.4000 00	0.000 000	1.0000 00	4.0000 00	2.000 000
<i>Maximum</i>	1.000 000	1.421 626	1.8494 75	0.7000 00	1.000 000	1.0000 00	19.000 00	6.000 000
<i>Minimum</i>	0.000 000	0.3333 87	0.2940 92	0.2000 00	0.000 000	0.0000 00	1.0000 00	0.000 000
<i>Std. Dev.</i>	0.451 261	0.224 666	0.2190 83	0.1141 18	0.429 235	0.3775 25	2.6967 99	1.244 747

Keterangan: Kecurangan Laporan Keuangan (KLK), Stabilitas Keuangan (SK), Tekanan Eksternal (TE), Pengawasan yang Tidak Efektif (PTE), Pergantian Auditor (PA), Pergantian Direksi (PD), Arogansi (ARO), Kolusi (KL)

Source: Processed Data, 2023

**Table 2 Descriptive Statistics of Dummy Variables**

Variabel	Indikator	Frekuensi	Persentase
KLK	0	72	72.00 %
	1	28	28.00 %
PA	0	76	76.00 %
	1	24	24.00 %
PD	0	17	17.00 %
	1	83	83.00 %

Keterangan: Kecurangan Laporan Keuangan (KLK),  
Pergantian Auditor (PA), Pergantian Direksi  
(PD)

Source: Processed Data, 2023

Based on the table above, the results of the descriptive statistical tests in this study show that:

#### **Financial Statement Fraud**

The financial statement fraud variable has a minimum value of 0.000000 and a maximum value of 1.000000. The median value is 0.000000 and the mean value is 0.280000 and the standard deviation value is 0.451261. The mean value is smaller than the standard deviation, so the data deviation is relatively large. Table 2 is an additional descriptive statistic for variables using dummy variable proxies. These results show that the financial statement fraud variable with code 0 is 72 sample data or 72.00% and code 1 is 28 sample data or 28.00%.

#### **Financial Stability**

The financial stability variable in table 1 above has a minimum value of -0.333387 for companies coded GIAA in 2021 and a maximum value of 1.421626 for companies coded GIAA in 2020. The median value is 0.081027. The mean value of the financial stability variable is 0.125088 with a standard deviation of 0.224666. The mean value is smaller than the standard deviation, which means that the data deviation is relatively large.

#### **External Pressure**

The external pressure variable in table 1 above has a minimum value of 0.294092 for companies coded PTBA in 2019 and a maximum value of 1.849475 for companies coded GIAA in 2021. The median value is 0.723700. The mean value of the external pressure variable is 0.672035 with a standard deviation of 0.219083. The mean value is greater than the standard deviation, which means that the data deviation is relatively small.

#### **Ineffective Oversight**

The ineffective monitoring variable in table 1 above has a minimum value of 0.200000 for companies with the SMBR code in 2017. The maximum value is 0.700000 for companies with the BBNI code in 2021. The median value is 0.400000. The mean value

of the ineffective control variable is 0.430948 with a standard deviation of 0.114118. The mean value is greater than the standard deviation, which means that the data deviation is relatively small.

#### **Auditor Change**

The auditor turnover variable in table 1 above has a minimum value of 0.000000 and a maximum value of 1.000000. While the median value is 1.000000. The mean value of the auditor turnover variable is 0.240000 with a standard deviation of 0.429235. The mean value is smaller than the standard deviation, which means that the data deviation is relatively large.

Based on table 2 above, there were 24 companies that changed their auditors and 76 companies did not change their auditors. The number of companies that change auditors is 24.00%. While the number of companies that do not change the auditor is 76.00%.

#### **Change of Directors**

The change of directors variable in table 1 above has a minimum value of 0.000000 and a maximum value of 1.000000. While the median value is 1.000000. The mean value of the change of directors variable is 0.830000 with a standard deviation of 0.377525. The mean value is greater than the standard deviation, which means that the data deviation is relatively small. Based on table 2 above, there were 83 companies that changed directors and 17 companies did not change directors. The number of companies that change directors is 83.00%. Meanwhile, the number of companies that did not replace directors was 17.00%.

#### **arrogant**

The arrogance variable in table 1 above has a minimum value of 1.000000 for the 2020 PGAS code company and a maximum value of 19.000000 for the 2021 PTPP code company. The median value is 4.000000. The mean value of the arrogance variable is 4.800000 with a standard deviation of 2.696799. The mean value is greater than the standard deviation, which means that the data deviation is relatively small.

#### **collusion**

The collusion variable in table 1 above has a minimum value of 0.000000 for ADHI code companies in 2020-2021, BBTN in 2019, INAF in 2017-2020, PTBA in 2017, TINS in 2018-2021, and TLKM in 2017-2018 and the maximum value is 6.000000 for the company code BBRI in 2021. The median value is 2.000000, the mean value is 1.810000 and the standard deviation is 1.244747. The mean value is greater than the standard deviation, which means that the data deviation is relatively small.

#### **Partial Test (t)**

The partial test aims to determine the effect of the independent variable on the dependent variable partially. The test results can be seen in the table below:

**Table 3 Partial Test Results (t test)**

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>z-Statistic</i>	<i>Prob.</i>
C	-0.825337	1.317955	-0.626225	0.5312
SK	2.050065	1.157491	1.771127	0.0765
TE	0.738196	1.278958	0.577186	0.5638
PTE	-2.053254	2.669958	-0.769021	0.4419
PA	1.212095	0.539224	2.247848	0.0246
PD	0.358062	0.665210	0.538269	0.5904
ARO	-0.154116	0.127501	-1.208741	0.2268
KL	0.010604	0.231747	0.045758	0.9635

Keterangan: Stabilitas Keuangan (SK), Tekanan Eksternal (TE), Pengawasan yang Tidak Efektif (PTE), Pergantian Auditor (PA), Pergantian Direksi (PD), Arogansi (ARO), Kolusi (KL)

Source: Data processed 2023



Based on the partial test results using the Eviews 10 program by looking at the z-statistical values and probability values. From the test results can be explained as follows:

- a. Financial Stability Based on table 3 above, it shows the z-statistic value with the number 1.771127 on the financial stability variable and a probability value of 0.0765 > 0.05. These results show that the financial stability variable has no influence on the dependent variable of financial statement fraud. With this explanation, H1 which states that financial stability has a negative effect on fraudulent financial statements is rejected.
- b. External Pressure Based on table 3 above, it shows the z-statistic value with the number 0.577186 on the external pressure variable and a probability value of 0.5638 > 0.05. The results show that the independent variable external pressure has no effect on the dependent variable of financial statement fraud. With this explanation, H2 which states that external pressure has a positive effect on fraudulent financial statements is rejected.
- c. Ineffective Monitoring Variables Based on table 3 above, it shows the z-statistic value with the number -0.769021 on the ineffective monitoring variable and a probability value of 0.4419 > 0.05. The results show that the ineffective control variable has no effect on the dependent variable of fraudulent financial statements. With this explanation, H3 which states that ineffective supervision has a positive effect on fraudulent financial reporting is rejected.
- d. Auditor Turnover Variable Based on table 3 above, shows the z-statistic value with the number is 2.247848 in the auditor turnover variable and the probability value is 0.0246 < 0.05, which means that the auditor turnover variable shows a positive effect on the financial statement fraud variable. With this explanation, H4 which states that changing auditors has a positive effect on fraudulent financial statements is accepted.
- e. Change of Directors Variable Based on table 3 above, it shows the value of the z-statistic with the number 0.538269 on the variable change of directors and a probability value of 0.5904 > 0.05. These results show that the independent variable of the change of directors has no effect on the dependent variable of fraudulent financial reporting. With this explanation, H5 which states that the change of directors has a positive effect on fraudulent financial statements is rejected.
- f. Arrogance Variable Based on table 3 above, it shows the z-statistic value with the number -1.208741 on the arrogance variable and a probability value of 0.2268 > 0.05. The results show that the independent variable arrogance has no effect on the dependent variable of financial statement fraud. With this explanation, H6 which states that arrogance has a positive effect on fraudulent financial statements is rejected.
- g. Collusion Variables Based on table 3 above, it shows the z-statistic value with a number of 0.045758 on the collusion variable and a probability value of 0.9635 > 0.05. These results indicate that the collusion variable has no influence on the dependent variable of financial statement fraud. With this explanation, H7 which states that collusion has a positive effect on fraudulent financial statements is rejected.

**Overall Model Test (Overall Model Fit)/Simultaneous Test (F Test)**

The Overall Model Fit test in this study can be seen from the probability value (LR statistic). The following are the results of the Overall Model Fit test:

Table 4 Test Results (Overall Model Fit) / Simultaneous Test (Test F)

<i>LR statistic</i>	14.82882
<i>Prob (LR statistic)</i>	0.038257

Source: data processed in 2023

In the Overall Model Fit Test, the table above shows that the probability value (LR statistic) is  $0.038257 < 0.05$ . So it can be concluded that there is a simultaneous influence between the independent variables on the dependent variable of fraudulent financial statements.

### Discussion

Based on the data processing that has been done, the results of the hypothesis can be seen in the table below:

**Table 5. Summary of Hypothesis Results**

hypothesis	Statement	coefficient	Prob.	Conclusion
H1	Financial stability has a negative effect on reporting fraud finance	2.050065	0.0765	H1 Rejected
H2	External pressure has a positive effect on reporting fraud finance	0.738196	0.5638	H2 Rejected
H3	Ineffective supervision has a positive effect on reporting fraud finance	-2.053254	0.4419	H3 Rejected
H4	Auditor change has a positive effect on reporting fraud finance	1.212095	0.0246	H4 Accepted
H5	Change of directors positive effect on fraud reports finance	0.358062	0.5904	H5 Rejected
H6	Arrogance effect positive on fraudulent financial reporting	-0.154116	0.2268	H6 Rejected
H7	Collusion has a positive effect on reporting fraud finance	0.010604	0.9635	H7 Rejected

Source: data processed in 2023

### The Influence of Financial Stability on Fraudulent Financial Statements

The results of this study prove and show that financial stability has no effect on fraudulent financial reporting. Indicated by the probability value on the financial stability variable that is greater than the levelsignificant with the number  $0.0765 > 0.05$  and the results of the regression coefficient show a value of 2.050065. This shows that the financial stability variable has no effect on fraudulent financial statements so that H1 is rejected.

### The Effect of External Pressure on Fraudulent Financial Statements

The results of this study prove and show that external pressure has no effect on fraudulent financial statements. Shown by the probability value on the external pressure variable is greater than the significance level with the number  $0.5638 > 0.05$  and the results of the regression coefficient show a value of 0.738196. This shows that the external pressure variable has no effect on fraudulent financial statements so that H2 is rejected. Agency theory explains that the difference in interests between the agent and the principal causes

management as an agent to experience pressure, one of which is to obtain additional funds from outside parties. Pressure to obtain additional funds can encourage management to commit fraud in financial reporting (Imtikhani & Sukirman, 2021). However,

#### **The Effect of Ineffective Oversight on Fraudulent Financial Statements**

The results of this study prove and show that ineffective supervision has no effect on fraudulent financial reporting. Indicated by the probability value on the oversight variable that is more ineffective greater than the significance level with the number  $0.4419 > 0.05$  and the results of the regression coefficient show a value of  $-2.053254$ . This shows that the ineffective control variable has no effect on fraudulent financial reporting so that H3 is rejected.

#### **The Effect of Auditor Change on Financial Statement Fraud**

The results of this study prove and show that changing auditors has an influence on fraudulent financial statements. Shown by the probability value on the variable auditor turnover is smaller than the significance level with the number  $0.0246 < 0.05$  and the results of the regression coefficient show a value of  $1.212095$ . This shows that the auditor turnover variable has a positive influence on financial statement fraud so that H4 is accepted.

#### **The Effect of Change of Directors on Fraudulent Financial Statements**

The results of this study prove that the change of directors has no effect on fraudulent financial statements. Indicated by the probability value on the variable director turnover is greater than the significance level with the number  $0.5904 > 0.05$  and the results of the regression coefficient show a value of  $0.358062$ . These results indicate that the change of directors variable has no effect on fraudulent financial statements so that H5 is rejected. Agency theory explains that the board of directors as an agent can have personal interests to enrich themselves. Therefore, the company changes the members of the board of directors to reduce the emergence of agency conflicts between agents and principals. However,

#### **The Effect of Arrogance on Fraudulent Financial Statements**

The results of this study prove that arrogance has no effect on fraudulent financial statements. Shown by the probability value on the arrogance variable is greater than the significance level with the number  $0.2268 > 0.05$  and the results of the regression coefficient show a value of  $-0.154116$ . This shows that the arrogance variable has no effect on fraudulent financial statements so that H6 is rejected.

#### **The Effect of Collusion on Fraudulent Financial Statements**

The results of this study prove and show that collusion has no effect on fraudulent financial statements. Shown by the probability value of the collusion variable is smaller than the significance level with the number  $0.9635 < 0.05$  and the results of the regression coefficient show a value of  $0.010604$ . This shows that the collusion variable has no effect on fraudulent financial statements so that H7 is rejected.

### **CONCLUSION**

This study discusses how the influence of financial stability, external pressure, ineffective supervision, auditor changes, changes of directors, arrogance and collusion on fraudulent financial statements in BUMN listed on the IDX in 2017-2021, so that the overall results of this study can be drawn. conclusion:

1. The financial stability variable has no effect on fraudulent financial statements. Companies with good or bad financial stability have no effect on fraudulent financial statements.
2. The external pressure variable has no effect on fraudulent financial statements. Companies with high or low levels of leverage have no effect on fraudulent financial statements.
3. Ineffective monitoring variable has no effect on fraudulent financial reporting. Companies with a large or small number of independent commissioners have no effect on fraudulent financial statements.
4. Auditor change variable has an effect on fraudulent financial statements. The more often the company changes the auditor, the higher the financial statement fraud.
5. The change of directors variable has no effect on fraudulent financial statements. Companies that often change directors or not have no effect on fraudulent financial statements.
6. The arrogance variable has no effect on fraudulent financial statements. Companies with a large number of CEO photos in the company's annual financial statements have no effect on fraudulent financial statements.
7. The collusion variable has no effect on fraudulent financial reporting. Companies with an independent board of commissioners who hold multiple positions with a large or small number have no effect on fraudulent financial reporting.

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