

## Fraud triangle perspective on the tendency of fraudulent financial statements in non-financial state-owned enterprises

Nindya Saphira Maharani Rinaldo\*

Reni Oktavia

Yunia Amelia

Accounting Department, University of Lampung, Lampung, Indonesia

### ABSTRACT

Fraud is a problem that continues to exist in the organizational world. Fraud is difficult to eliminate but can be minimized by taking preventive measures by detecting things that have the potential to cause fraud. Several previous studies have created research gaps due to different research results. Therefore, this study aims to analyze how the Fraud Triangle perspective detects the tendency of fraudulent financial statements with research samples of Non-financial State-Owned Enterprises listed on the IDX from 2016-2020. Fraudulent financial statements in this article were measured using Dechow F-Score and three dependent variables that represent each of the fraud triangle proxies with firm size as a control variable. Using logistic regression analysis, this research indicated pressure proxied by financial stability and measured using SALTA has a significant negative impact on the tendency of fraudulent financial statements. The pressure that occurs due to financial instability will encourage the tendency of fraudulent financial statements. Thus, companies and investors are expected to be more alert to the potential for fraudulent financial statements if the company's finances are not in a stable condition. Opportunities proxied by the nature of industry and Rationalization proxied by changes in external auditors do not have a significant impact on the tendency of fraudulent financial statements. There are several limitations, this study only used data with a span of five years, and the sample of this study is still limited because it only uses Non-financial State-Owned Enterprises listed on the IDX, and only uses one ratio that represents each independent variable in describing the fraud triangle. Further research is suggested to use other company sectors as research samples with a longer research period so that it can provide an overview of the existing phenomena more broadly and can use other proxies to describe the variables in this study.

### KEYWORDS

fraud triangle; fraudulent financial statement; government non-financial sectors

Received: 28 July 2022

Accepted: 10 August 2022

Published: 15 August 2022

## Introduction

Fraud is one of the problems that continue to exist in the organizational world (ACFE Indonesia, 2019). ACFE classifies fraud into three main branches, namely asset misappropriation, fraudulent financial statements, and corruption (Amrizal, 2004). Financial statements are one of the things that cannot be separated from the activities of a company. The information contained in the financial statements can reflect the company's financial condition for a certain period. Reliability and objectivity of financial statements are needed because the information contained in financial statements can also be considered when investors want to invest their funds so that fraud in financial statements reduces the confidence of interested parties such as company owners or potential investors in the reliability and objectivity of financial statements (Hery, 2015; Nasir et al., 2018).

ACFE, in its 2018 and 2020 Reports To The Nation, displays the number of reported fraud cases in the Asia Pacific Region. Fraud cases that occurred in the Asia Pacific region in 2020 decreased by 10% from 220 cases in 2018 to 198 cases in 2020 with a median loss of USD 195,000. However, when fraud cases in the Asia Pacific decreased, fraud cases in Indonesia increased from 29 cases in 2019 to 36 cases in 2020, even Indonesia which in 2018 was ranked third as the country with the most fraud cases in the Asia Pacific in 2020. become the first ranked country or the country with the most fraud cases in the Asia Pacific (ACFE, 2018, 2020).

According to ACFE Indonesia (2019) in the "Survei Fraud Indonesia", State-Owned Enterprises are the second most disadvantaged institution due to fraud after the government. From 2019 to 2021, there have been 153 state-owned companies in Indonesia that are indicated to be corrupt, according to CNN Indonesia (2021). Fraud within the organization does not just happen but is based on various causes that serve as reasons for committing fraud. Detection measures are one of the prevention efforts because, with the fraud detection action, regulators have a picture of the regulations that will be made (AICPA, 2018; Amrizal, 2004).

Donald R. Cressey (1953) in the research conducted by Skousen et al. (2011) developed a theory called the Fraud Triangle which was adopted in SAS No. 99. The Fraud Triangle Theory states that there are three reasons underlying the occurrence of financial statement fraud. First is pressure, when managers feel pressure if they receive threats, both threats from external parties, encouragement of financial targets, and maintaining stable finances so that the company is considered to have good performance. The second is an opportunity that shows how big the opportunity is to commit fraud. The third is rationalization or justification that arises in the minds of management when fraud has occurred because they do not want their actions to be known so they justify the manipulation that has been done (Skousen et al., 2011).

Several previous studies have created research gaps due to different research results, for example Fatkhurizqi & Nahar (2021) research stated that only pressure proxied by personal financial need affects fraudulent financial statements. While in the study of Fitri et al. (2019) research stated that all indicators affect fraudulent financial statements except pressure proxied by liquidity. Based on the description of the importance of fraud detection, this study will analyze whether the factors contained in the Fraud Triangle perspective have been empirically proven to influence the tendency of fraudulent financial statements in the company.

## Literature review

### *Agency theory*

Agency theory is a theory that emphasizes the relationship between shareholders as principals and managers as agents (Mahadwartha & Ismiyanti, 2008). This statement is in accordance with the statement of Jensen & Meckling (1976) that the agency relationship is a relationship that arises from a contract in which one or more principals instruct another agent to do something and delegate the authority for decision-making to the agent. Agency theory assumes that the agent has more comprehensive information about the company, be it performance, conditions, or prospects of the company when compared to the principal or it can be called information asymmetry. This can provide opportunities for agents to hide important information that is not known to the principal and present information that is not following actual conditions to the principal to maximize the welfare of the agent (Jensen & Meckling, 1976). Agency relationships exist when one party (principal) hires another party (agent) to perform services and in that case, the principal delegates authority to the agent to make decisions. However, in practice conflicts sometimes occur because each party has different interests. Agents often act only in their own interests and override the interests of the principal (Basrian, 2021).

### *Fraud*

According to ACFE, fraud is an act of fraud or a deliberate mistake to gain personal or group gain that can directly or indirectly harm other parties. ACFE classifies fraud as asset misappropriation, fraudulent financial statements, and corruption (Amrizal, 2004). Asset misappropriation is the theft or misuse of company assets or other parties. This form of fraud is easy to detect because it is easy to measure (tangible). Furthermore, financial statement fraud includes all actions taken by company officials or government agency officials in falsifying the company's financial statements and covering up the company's financial condition. Lastly Corruption, fraudulent acts committed by entities or individuals in business transactions to obtain personal benefits that are contrary to their duties and obligations.

### *Fraudulent financial statement*

According to the (AICPA, 2018) fraudulent financial statements are intentional acts or omissions that result in material misstatements that mislead financial statements. Fraud within the organization does not just happen, but because it is based on various causes and possibilities that are used as reasons for committing fraud. This is in accordance with the opinion of Aprilia (2017) that fraudulent financial reporting is an act of fraud in the form of a material misstatement of financial statements that are carried out by the company's management intentionally so that it has a detrimental impact on users of financial statements.

### *Fraud triangle*

The Fraud Hexagon Model is developed by Donald R. Cressey (1953) in the research conducted by Skousen et al. (2011). The Triangle Fraud was adopted in SAS No. 99. The Fraud Triangle Theory states that there are three reasons underlying the occurrence of financial statement fraud. First is pressure, when managers feel pressure if they receive threats, both threats from external parties, encouragement of financial targets, and maintaining stable finances so that the company is considered to have good performance. The second is an opportunity that shows how big the opportunity is to commit fraud. The third is rationalization or justification that arises in the minds of management when fraud has occurred because they do not want their actions to be known. Hence, they justify the manipulation that has been done (Skousen et al., 2011).

## **Hypothesis**

### *The effect of financial stability on fraudulent financial statements*

Agency theory states that in a company there is a relationship between the shareholders called the principal and the manager arising from a contract where the principal delegates decision-making authority to the management. Economic growth creates pressure on the management to provide the best performance for the principal, one of which is by trying to maintain the company's financial stability. Maintaining the company's financial stability can put pressure on management because every decision made by current management will affect the company's financial stability in the future.

Research conducted by Nisa et al. (2019) states that financial stability has a significant effect on financial statement fraud. The results of this study are supported by research conducted by Pangestu et al. (2020) which states that financial stability has a significant effect on financial statement fraud. Therefore, in this study, the following hypotheses were designed:

*H<sub>1</sub>: Financial stability has a significant effect on fraudulent financial statements*

### *The effect of nature of industry on fraudulent financial statements*

Agency theory assumes that the agent is the party who has more comprehensive information about the company and provides its opportunity to make fraudulent financial statements because management has better knowledge about the condition of a company than other parties. One of the opportunities for management to commit fraud is to take advantage of the ideal conditions of a company that cannot be separated from subjectivity, namely the ideal condition of the company's inventory. Inventory cannot be assessed completely objectively because trade inventory cannot be separated from obsolete inventory. Besides that, when the company experiences an increase in inventory from the previous year, the company can be indicated to have poor cash turnover because the cash owned by the company settles in the form of inventory.

According to research by Nisa et al. (2019) in their research, the Nature of the Industry has a significant effect on financial statement fraud. This statement is supported by the results of research by Sari & Nugroho (2020) which state that the opportunity, which is projected by Nature of Industry, has a significant positive impact on financial statement fraud. Therefore, in this study the following hypotheses were designed:

*H<sub>2</sub>: Nature of Industry has a significant effect on fraudulent financial statements*

### *The effect of external auditor change on fraudulent financial statement*

Agency theory assumes agents as parties who have more comprehensive information about the company than other interested parties (principals). This can cause agents to justify and assume all forms of decisions and activities that they do are rational decisions. Rationalization is the justification of fraud by the perpetrator that the fraudulent activity is reasonable to do. Rationalization makes those who previously did not want to commit fraud to be motivated to do so (Purwatomiasih et al., 2021). One form of justification for the manipulation carried out is by utilizing the change of the company's external auditor.

Auditor turnover has previously been used by several researchers to proxy rationalization in fraud theory, one of which is the research conducted by Ulfah et al. (2017) which concluded that auditor turnover has a significant effect on financial statement fraud. Changes in auditors in a company can be assessed as an effort to eliminate fraud attempts discovered by previous auditors. Thus, changes in auditors can increase the tendency for fraudulent financial statements to occur in companies by rationalizing misstatements that are considered immaterial but have been suspected by previous auditors. Therefore, in this study, the following hypotheses were designed:

*H<sub>3</sub>: The change of external auditor has a significant effect on fraudulent financial statements*

## **Methods**

This study uses secondary data in the form of annual reports, financial reports, and information contained on the company's website. The data obtained were processed using IBM SPSS 26 using logistic regression analysis. This study uses logistic regression because the dependent variable is dichotomous. This research will conduct several tests such as Case Processing to prove there is no missing data in this study, descriptive statistics to describe the data that has been obtained, overall model test to test whether the hypothesized regression model is following the data, Hosmer and Lemeshow's goodness of fit test to test the feasibility of the regression model in predicting the value of the observations, coefficient of determination test to see whether the independent variable can explain the dependent variable, classification matrix test to assess the strength of the regression model in predicting the possibility of acceptance of the dependent variable, wald test to determine how each independent variable in this study partially affects the dependent variable, and omnibus test of model coefficients to determine how the independent variables in this study simultaneously affect the dependent.

## Participants

The population used in this study are Non-financial State-Owned Enterprises listed on the IDX. The sample used in this study was taken using a purposive sampling method with the criteria described in Table 1.

**Table 1.** Purposive sampling criteria

No	Criteria	Total
1.	Non-financial State-Owned Enterprises listed on the IDX from 2016 to 2020	25
2.	Non-financial State-Owned Enterprises that were excluded from the list of IDX companies from 2016 to 2020	(0)
3.	Companies that are no longer State-Owned Enterprises from 2016 to 2020	(6)
4.	Non-financial State-Owned Enterprises that do not present the data needed for observation and are fully published for the 2016-2020 period	(2)
<b>The number of companies that became the research sample</b>		<b>17</b>
<b>Total number of research samples (period 2016-2020)</b>		<b>85</b>

## Instruments

This study has one dependent variable, three independent variables, and one control variable. These variables are listed in Table 2.

**Table 2.** The variable measurements

Variable	Proxies	Measurement
Y	Fraudulent Financial Statement (F-Score)	F-Score = RSST Accrual - Financial Performance Dummy: 1 if F-Score > 1, 0 if F-Score < 0
X1	Stimulus (Financial Stability)	$SALTA = \frac{Sales_{it}}{Total\ Asset_{it}}$
X2	Opportunity (Nature of Industry)	$INVENTORY = \frac{Inventory_{it}}{Sales_{it}} - \frac{Inventory_{it-1}}{Sales_{it-1}}$
X3	Rationalization (External Auditor Change)	Dummy: 1 if there is a change in the Public Accounting Firm, 0 if there is not a change in the Public Accounting Firm
Control	Company Size	SIZE = Ln Total Assets

## Data analysis

This study uses logistic regression analysis. Logistic regression analysis was used because the dependent variable in the study is dichotomous so it only has two values, namely 0 which means that it is not indicated to commit a fraudulent financial statement, and 1 which means that it is indicated to commit a fraudulent financial statement. Tests in this study were carried out using the help of the IBM SPSS 26 program. In logistic regression analysis, to determine the right model to be applied in this study, several tests were carried out such as Overall Model Fit, Regression Model Feasibility Test, Coefficient of Determination Test (Nagelkerke R Square), and Classification Matrix Test.

## Results

### Case processing

**Table 3.** Case Processing Summary

Unweighted Cases		N	%
Selected Cases	Included in Analysis	85	100.0
	Missing Cases	0	.0
	Total	85	100.0
Unselected Cases		0	.0
Total		85	100.0

This study uses 85 samples originating from Non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange in 2016 to 2020. Based on the Case Processing Summary contained in Table 3, information is obtained that 85 observations (N = 85) have a total percentage of 100% means that each variable used in this study provides complete and appropriate information.

### Descriptive statistic

**Table 4.** Descriptive statistic

Variable	N	Minimum	Maximum	Mean	Std. Deviation
FFS	85	0	1	.08	.277
SALTA	85	.0850	1.1166	.431332	.2315683
INVENTORY	85	-.1367	.3415	.018733	.0748370
AUDCHANGE	85	0	1	.31	.464
SIZE	85	19.2210	29.0014	22.421354	2.0638251

Based on Table 4, information is obtained that the dependent variable FFS has a standard deviation of 0.277 and an average value of 0.08 or there are 8% of sample companies that are indicated to tend to commit fraudulent financial statements. The FFS variable is dichotomous which only has two values, namely 1 and 0, so the maximum value is 1 and the minimum is 0.

The independent variable SALTA has an average value of 0.431332 or 43.13% which means the average sales rate of the company is 43.3% compared to the total assets and a standard deviation of 0.2315683. The SALTA variable has a minimum value of 0.0850 or 8.5% which comes from PT Angkasa Pura I in 2020 and a maximum value of 1.1166 or 111.66% which comes from the SALTA of PT Brantas Abipraya in 2016. The INVENTORY variable has an average value of 0.0187 or 1,87% which means the average rate of change in accounts receivable to sales is 1.87% and a standard deviation of 0.0748370. The INVENTORY variable has a maximum value of 0.3415 or 34.15% which is owned by PT Wijaya Karya Tbk. in 2020 and a minimum value of -0.1367 or -13.67% which came from PT Hutama Karya in 2017. The AUDCHANGE variable has an average value of 0.31 or there are 31% of the research sample that changes in Public Accounting Firm and a standard deviation of 0.464. The AUDCHANGE variable is dichotomous which only has two values, 1 and 0 so the maximum value is 1 and the minimum is 0.

The control variable SIZE has an average value of 22.4214 which means the average company size in this research is 22.4214 and a standard deviation of 2.0638. The SIZE variable has a minimum value of 19.2210 which comes from PT Brantas Abipraya in 2016 and a maximum value of 29.0014 which comes from the PT Krakatau Steel Tbk. in 2016.

### Overall model test

The overall model assessment (Overall Model Test) aims to test whether the hypothesized regression model is following the data. Table 5 shows the Test Model Fit block 0: -2LL step 0 shows a constant result between -2LL and a constant coefficient at a value of 48.361 with a constant coefficient of -2.411.

**Table 5.** Model Fit Test Block 0: -2 LL step 0

Iteration	-2 LL	Coefficients Constant
Step 0	1	52.694
	2	48.556
	3	48.362
	4	48.361
	5	48.361

Table 6 shows the Model Fit Test block 1: -2LL step 1 which has a constant result between -2LL and a constant coefficient at a value of 22.274 with a constant coefficient of 20.374.

**Table 6.** Model Fit Test Block 1: -2 LL step 1

Iteration	-2 LL	Coefficients Constant
Step 1	1	46.966
	2	35.680
	3	29.280
	4	25.150
	5	22.905
	6	22.319
	7	22.274
	8	22.274
	9	22.274
	10	22.274

Based on the overall model test that has been carried out, it can be seen in Table 7 that the values of -2LL Block 0 and -2LL Block 1 decreased by 27.987 from 48.361 to 20.374 after the independent variables were included. Based on the test results, it is proven that there is a decrease in the value of -2LL Block 0 and Block 1 which shows that the independent variables included in the model have improved the model to fit.

**Table 7.** Deduction from -2LL block 0 to -2LL block 1

-2LL block 0	48.361
--------------	--------

-2LL block 1	20.374
-2LL Deduction	27.987

### Hosmer and Lemeshow's Goodness of fit test

**Table 8.** Hosmer and Lemeshow's Goodness of Fit Test

Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	4.037	7	.776

Table 8 shows the results of the feasibility test of the regression model that has been processed using IBM SPSS 26. Based on the tests that have been carried out, a significance value of 0.776 is obtained where the value is greater than 0.05. So that the model in this study is appropriate and can predict the value of the observations.

### Coefficient of determination test

The coefficient of determination test is used to see whether the independent variable can explain the dependent variable. In Table 9, the Nagelkerke R Square value is 0.609 which indicates that in this study the independent variable was able to explain the dependent variable by 60.9% while 39.1% was explained by other variables that were not explained further in this study.

**Table 9.** The coefficient of determination test results

Cox & Snell R Square	Nagelkerke R Square
.264	.609

### Classification matrix test

The classification matrix test aims to assess the strength of the regression model in predicting the possibility of acceptance of the dependent variable (an indication of fraudulent financial statements). Table 10 shows the overall percentage of the classification matrix test of 95.3%, which means that the accuracy of the logistic regression calculations in this study is 95.3%.

**Table 10.** The classification matrix test

Predicted Observed	FFS		Percentage Correct
	Not indicated	Indicated	
FFS Not indicated	77	1	98.7
Indicated	3	4	57.1
Overall Percentage			95.3

### Wald test

Wald's test aims to determine how each independent variable in this study partially affects the dependent variable. Based on the Wald Test, the hypothesis will be accepted if the significance value is below 0.05. Table 11 shows the results of the Wald Test from the observation data used in this study. Based on that table there are two rejected hypotheses and one accepted hypothesis.

**Table 11.** Wald Test

Variabel	B	S.E.	Wald	df	Sig.	Hypothesis
SALTA	-33.195	12.916	6.605	1	.010	Accepted
INVENTORY	-2.694	7.911	.116	1	.733	Rejected
AUDCHANGE	-.032	1.420	.000	1	.982	Rejected
SIZE	-.673	.460	2.144	1	.143	-
Constant	20.374	11.235	3.289	1	.070	-

### Omnibus test of model coefficients

The Omnibus Test of Model Coefficients aims to determine how the independent variables in this study simultaneously affect the dependent. Based on the results of the Omnibus Test of Model Coefficients, a significance value of 0.000 was obtained where the value was below 0.05 so that the independent variables in this study were proven to simultaneously affect the dependent variable.

**Table 12.** Omnibus Test of Model Coefficients

Omnibus Test of Model Coefficients			
Step	Chi-square	df	Sig.
Step 1	26.088	4	.000

<b>Block</b>	26.088	4	.000
<b>Model</b>	26.088	4	.000

## Discussion

### *The effect of pressure on fraudulent financial statements*

The pressure in this study is proxied by the financial stability measured using the SALTA percentage has a significance value of 0.010 where this value is below the significance level used in this study ( $\alpha = 0.05$ ) so that hypothesis 1 which states that SALTA has a significant relationship with fraudulent financial statements is supported. Besides that, SALTA has a negative coefficient of -33.195 which means that SALTA has a negative relationship with FFS. Thus, increasing SALTA in Non-financial State-Owned Enterprises listed on the IDX in 2016-2020 will reduce the tendency of companies to commit fraudulent financial statements.

SALTA describes how efficient the company's management is in utilizing the assets owned by the company. Agency theory developed by Jensen & Meckling (1976) states that in a company, management that has authority from investors has pressure to maintain financial stability, so that if the SALTA value is maintained and even increases, the level of investor confidence in management will increase. Under these conditions, management tends not to commit fraud when SALTA has a high value because the company's objectives to maintain financial stability have been fulfilled so that management does not receive pressure. Thus, new management will feel pressure if stability decreases and encourage management to manipulate financial statements. The results of this study also support the fraud triangle theory developed by Vousinas (2019) which states that pressure is one aspect that affects the occurrence of financial statements.

This study supports the research conducted by Aprilia (2019) which states that the financial stability, proxied by SALTA has a significant negative relationship with fraudulent financial statements. According to Aprilia (2019) Maintaining financial stability can occur because the company has a good early warning system for its financial stability, not because there is a manipulation of financial statements. In addition, research conducted by Mehanna & Soliman (2021) also states that SALTA and fraudulent financial statements have a significant negative relationship.

### *The effect of opportunity on fraudulent financial statements*

Opportunity in this study is proxied by the nature of the industry which is measured using the level of change in receivables on sales has a negative coefficient of -2.694 which means that nature of industry has a negative relationship with fraudulent financial statements. Besides that, nature of industry has a significance value of 0.733 where this value is above the significance level used in this study ( $\alpha = 0.05$ ) so hypothesis 2 states nature of industry has a significant positive relationship with fraudulent financial statements is not supported. Therefore, the increasing nature of industry in Non-financial State-Owned Enterprises listed on the IDX in 2016-2020 did not have a significant effect on the tendency of companies to commit fraudulent financial statements.

In the case of adding or reducing existing inventory, it will not encourage management to report reporting because the inventory will not interfere with the cash available for the company's operational interests. The results of this study do not support the hypothesis of agency theory developed by Jensen & Meckling (1976) where management as the party who has more information about the company will take advantage of inventory conditions that are free from subjectivity to commit fraud. In addition, the results of the research conducted do not support one of the proxies of the fraud triangle theory which states that the opportunity that can be proxied by the level of change in inventory to total assets is one aspect that causes fraud.

This study supports research conducted by Pangestu et al. (2020) which states that the nature of industry does not have a significant effect on fraudulent financial statements. In addition, this study supports the results of research conducted by Sabatian & Hutabarat (2020) that the nature of the industry does not have a significant positive effect on fraudulent financial statements.

### *The effect of rationalization on fraudulent financial statements*

Rationalization which in this study is proxied by external auditor turnover has a coefficient value of 0,032 which means that external auditor turnover occurs in Non-financial State-Owned Enterprises listed on the IDX in 2016-2020 has a negative relationship to fraudulent financial statements. In addition, the proxy for external auditor turnover has a significance value of 0.983 where this value is above the significance level used in this study, ( $\alpha = 0.05$ ) so hypothesis 3 states that external auditor turnover has a significant relationship with fraudulent financial statements is not supported. Therefore, changes in external auditors that occurred in Non-financial State-Owned Enterprises listed on the IDX in 2016-2020 did not have a significant effect on the tendency of companies to commit fraudulent financial statements.

This study shows that the change of external auditors does not have a significant effect on the tendency of fraudulent financial statements. The results of this study do not support the fraud triangle theory developed by Skousen et al. (2011) which states that rationalization affects fraudulent financial statements. Octani et al. (2022) states that auditor turnover does not always occur because the company wants to cover up its fraudulent financial statements. In companies, especially state-owned companies, some regulations need to be considered that regulate public accounting services. Changes in auditors can occur due to the Regulation of the Minister of Finance of the

Republic of Indonesia Number: 17/PMK.01/2008 Article 3 paragraph 1 states that Public Accounting Firm can provide general audit services on financial statements to a company for a maximum of six consecutive financial years (Indonesian Ministry of Finance, 2008). In addition, auditor turnover can occur if the company is not satisfied with the auditor's performance so that in the next period the company replaces the external auditor.

The results of this study support the research conducted by Rahman et al. (2021) which states that changes in external auditors do not have a significant effect on the tendency of fraudulent financial statements. Fraudulent financial statements that occur are not entirely caused by how good the external auditors are, but rather by morals, ethics, and personality. In addition, Syifani (2021) in his research also states that changes in external auditors do not have a significant effect on fraudulent financial statements.

## Conclusion

Based on the results of the previously discussed research regarding the effect of the fraud triangle perspective on the tendency of fraudulent financial statements in Non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange from 2016 to 2020, it can be concluded that pressure proxied by financial stability and measured using SALTA has a significant negative impact to the tendency of fraudulent financial statements. Opportunities proxied by the nature of industry and Rationalization proxied by changes in external auditors do not have a significant impact on the tendency of fraudulent financial statements.

Based on the results of this study, the pressure that occurs due to financial instability will encourage the tendency of fraudulent financial statements. Thus, companies and investors are expected to be more alert to the potential for fraudulent financial statements if the company's finances are not in a stable condition. In addition, other independent variables, namely the nature of the industry and the change of public accounting firms, although they do not partially affect, have a simultaneous influence on the tendency of financial statement fraud as seen from The Omnibus Test of Model Coefficients so the fraud triangle affects fraudulent financial statements together. The simultaneous effect of these independent variables cannot be separated from the influence of firm size as a control variable. Although the size of the company does not have a significant effect on the tendency of financial statement fraud, by taking into account the size of the company, the three variables significantly have a simultaneous effect.

There are several limitations in this study, including this study only used data with a span of five years, so this study could not provide a more detailed picture of the sample in the previous and following years. In addition, the sample of this study is still limited because it only uses Non-financial State-Owned Enterprises listed on the IDX, and only uses one ratio that represents each independent variable in describing the fraud triangle. Further research is suggested to use other company sectors as research samples with a longer research period so that it can provide an overview of the existing phenomena more broadly and can use other proxies to describe the variables in this study.

## Acknowledgements

I would like to thank my colleagues, mentors, and all those who have helped me in the process of making this study.

## Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## References

- ACFE. (2018). *Report To the Nations 2018 Global Study on Occupational Fraud and Abuse*. 10, 10,80.
- ACFE. (2020). *Report To the Nations 2020 Global Study on Occupational Fraud and Abuse*.
- ACFE Indonesia. (2019). *Survei Fraud Indonesia 2019*.
- AICPA. (2018). Consideration of Fraud in a Financial Statement Audit. In *Audit and Accounting Guide*.  
<https://doi.org/10.1002/9781119529088.app7>
- Amrizal. (2004). Pencegahan dan Pendeteksian Kecurangan oleh Internal Auditor. *Pengantar auditing*, 5(Internal Audit), 1-17.
- Aprilia. (2017). Analisis Pengaruh Fraud Pentagon Terhadap Kecurangan Laporan Keuangan Menggunakan Beneish Model Pada Perusahaan Yang Menerapkan Asean Corporate Governance Scorecard. *Jurnal ASET (Akuntansi Riset)*, 9(1), 101.  
<https://doi.org/10.17509/jaset.v9i1.5259>
- Aprilia, S. R. N. A. (2019). *Deteksi Kecurangan Laporan Keuangan dengan Metode Fraud diamond pada Perusahaan Jasa Sub Sektor Bank yang Terdaftar di Bursa Efek Indonesia tahun 2014-2018*. 7(2), 107-115.
- Basrian, P. B., Oktavia, R., & Tubarat, C. P. T. (2021). Beban Pajak Tangguhan, Leverage, Asimetri Informasi terhadap Manajemen Laba. *Jurnal Akuntansi Dan Keuangan*, 26(1), 43-54.
- CNN Indonesia. (2021). Erick Thohir: Ada 159 Kasus Korupsi di Kementerian BUMN. In *Cnnindonesia.Com*.
- Fatkhurrizqi, M. A., & Nahar, A. (2021). Analisis Fraud Triangle dalam Penentuan Terjadinya Financial Statement Fraud. *Jurnal Akuntansi*, 7(1), 14-25. <https://financial.ac.id/index.php/financial%0AANALISIS>
- Fitri, F. A., Syukur, M., & Justisa, G. (2019). Do the fraud triangle components motivate fraud in Indonesia? *Australasian Accounting, Business and Finance Journal*, 13(4), 63-72. <https://doi.org/10.14453/aabfj.v13i4.5>
- Hery. (2015). Mengenal dan Memahami Dasar-Dasar Laporan Keuangan. In *PT. Grasindo*.
- Indonesian Ministry of Finance. (2008). *Salinan Peraturan Menteri Keuangan Nomor 17/PMK.01/2008 tentang Jasa Akuntan Publik*.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of The Firm: Managerial Behavior, Agency Cost and Ownership Structure. *Journal of Financial Economic*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)

- Mahadwartha, P. A., & Ismiyanti, F. (2008). Debt policy, free cash flow hypothesis, and balancing of agency theory through ownership: Evidence from Indonesia. *Corporate Ownership and Control*, 5(2), 256-263. <https://doi.org/10.22495/cocv5i2c2p2>
- Mehanna, S. F., & Soliman, M. M. (2021). Can Fraud Triangle Model Predict Fraudulent Financial Statements? Evidence from Egypt. 124-72), 4(12, □□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□. <https://doi.org/10.21608/jces.2021.218615>
- Nasir, N. A. binti M., Ali, M. J., Razzaque, R. M. R., & Ahmed, K. (2018). Real Earnings Management and Financial Statement Fraud: Evidence from Malaysia. In *International Journal of Accounting & Information Management*. <https://doi.org/10.1108/IJAIM-03-2017-0039>
- Nisa, K., Oktafiana, N. F., & Sari, S. P. (2019). Fraudulent Financial Statement Ditinjau Dari Model Fraud Pentagon Horwath. *Urecol*, 164-177. <http://eproceedings.umpwr.ac.id/index.php/urecol9/article/viewFile/865/757>
- Octani, J., Dwiharyadi, A., & Djefris, D. (2022). Analisis Pengaruh Fraud Hexagon Terhadap Fraudulent Financial Reporting Pada Perusahaan Sektor Keuangan yang Terdaftar di Bursa Efek Indonesia Selama Tahun 2017-2020. *Jabei*, 1(1), 36-49. <https://akuntansi.pnp.ac.id/jabei>
- Pangestu, A. D., Oktavia, R., & Amelia, Y. (2020). Pendeteksian kecurangan laporan keuangan dengan menggunakan model beneish m-score: perspektif fraud diamond. *Jurnal Akuntansi, Keuangan, dan Manajemen*, 1(4), 301-313. <https://doi.org/10.35912/jakman.v1i4.90>
- Purwatmiasih, F., Sudrajat, & Oktavia, R. (2021). Academic Fraud in Online System during the COVID-19 Pandemic: Evidence from Lampung - Indonesia. *Asian Journal of Economics, Business and Accounting*, 21(2), 34-52. <https://doi.org/10.9734/ajeba/2021/v21i230349>
- Rahman, A., Deliana, D., & Gopas, D. (2021). Pendeteksian Kecurangan Laporan Keuangan Dengan Analisis Fraud Triangle Pada Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia. *Kajian Akuntansi*, 22(1), 9-19. <https://doi.org/10.29313/ka.v22i1.7787>
- Sabatian, Z., & Hutabarat, F. M. (2020). The Effect of Fraud Triangle in Detecting Financial Statement Fraud. *Jurnal Akuntansi*, 10(3), 231-244. <https://doi.org/10.33369/j.akuntansi.10.3.231-244>
- Sari, S. P., & Nugroho, N. K. (2020). Financial Statements Fraud dengan Pendekatan Vousinas Fraud Hexagon Model: Tinjauan pada Perusahaan Terbuka di Indonesia. *IHTIFAZ: Islamic Economic, Finance and Banking(ACI-IJIEFB)*, 409-430. <http://www.seminar.uad.ac.id/index.php/ihtifaz/article/view/3641>
- Skousen, C. J., Smith, K. R., & Wright, C. J. (2011). Detecting and Predicting Financial Statement Fraud: The Effectiveness of the Fraud Triangle and SAS No. 99. *SSRN Electronic Journal*, 99. <https://doi.org/10.2139/ssrn.1295494>
- Syifani, P. A. (2021). *Preventive Detection System pada Kecurangan Laporan Keuangan Berbasis Hexagon Fraud Analysis (Studi Empiris pada Perusahaan BUMN yang Terdaftar Di Bursa Efek Indonesia Tahun 2015-2019)*. <https://dspace.uii.ac.id/handle/123456789/30431>
- Ulfah, M., Nuraina, E., & Wijaya, A. L. (2017). Pengaruh Fraud Pentagon dalam Mendeteksi Fraudulent Financial Reporting (Studi Empiris pada Perbankan di Indonesia yang Terdaftar di BEI). *Forum Ilmiah Pendidikan Akuntansi*, 5(1), 399-418. Fraud, Fraud Pentagon, Fraudulent Financial Reporting
- Vousinas, G. L. (2019). Fraud-The human face of fraud: Understanding the suspect is vital to any investigation. *CA Magazine-Chartered Accountant*, 136(4), 39-40.