

FRAUD PENTAGON IN FRAUDULENT FINANCIAL STATEMENTS

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Abstract: This study aims to examine the fraud pentagon, namely the effect of pressure, opportunity, rationalization, ability, and arrogance in fraudulent financial statements. This type of research is descriptive verification which is causality in nature. The unit of analysis in the research is BUMN listed on the Indonesia Stock Exchange in 2015-2019. This research data is a sample with purposive sampling technique and obtained 30 data samples. And analyzed by logistic regression analysis techniques. The results of this study show partially the effectiveness of proxy control of opportunity to influence financial statement fraud. Meanwhile, financial pressure (ROA), rationalization (auditor change), and arrogance (share ownership) do not affect fraudulent financial statements.

Keywords: fraudulent financial statements, pentagon.

INTRODUCTION

The financial report is information that is prepared by company management to describe the company's performance, management's accountability in a certain period. Financial reports are a benchmark for future investment activities by external parties (Siddiq et al., 2017). The financial statements will show the actual condition of the company and through the financial reports of investors and creditors make their decisions. PSAK no. 1, which was revised in 2017, explains that a suitable financial report is a report that provides information on the financial position, performance, and changes in the financial position to benefit a large number of users in making decisions. For that companies need to present financial reports that are accurate, relevant, and free from fraud.

According to Zimbelman (2009) (Siddiq et al., 2017), Fraud or fraud is an effort that includes the skills and intelligence of a person to get benefits from other parties in the wrong way of presenting. Fraud is an act of violation, fraud, concealment involving an organization or company to get benefits for itself. Fraud or fraud in Indonesia is nothing new. There have been many cases of fraud reported by the KPK and exposed in the media. In the ICW Indonesia Corruption Watch records in 2019, there were 271 cases handled throughout the year.

Fraud cases occur because management must improve performance to look good to get additional funds from investors. In development and competition, companies do not always produce a performance as expected, however, companies must maintain the company's survival with additional funds from investors (Triyanto, 2019).

Fraud in financial reports must be minimized faster to prevent fraud from occurring. In detecting fraud early, there are several theories used to determine the causes of fraud. Several theories of the cause are the fraud triangle, the fraud diamond, and the fraud

pentagon. In 1953, Cressey (Skousen et al., 2011) introduced three factors that always influence fraud, namely pressure, opportunity, and rationalization, which is known as the fraud triangle. This theory is not refuted, but Wolfe and Hermanson (Wolfe & Hermanson, 2004) add one component to complement the three existing factors, namely capability, these four factors which are commonly referred to as fraud diamonds. However, in 2011, Jonathan Marks the leader of the Fraud, Ethics, and Anti-Corruption a Solutions Initiative in Crowe Horwarth LLP in the United States revealed that the fraud triangle is no longer sufficient (Marks, 2011) So he added other factors that led to fraud, namely arrogance and ability which became known as the fraud pentagon. The results of the ACFE survey of fraud were mostly carried out by the owners or the executives of the company themselves because their sense of ego and arrogance created an opinion that felt that the company's internal control would not affect its authority and power. So he added other factors that led to fraud, namely arrogance and ability which became known as the fraud pentagon. The results of the ACFE survey of fraud were mostly carried out by the owners or the executives of the company themselves because their sense of ego and arrogance created an opinion that felt that the company's internal control would not affect its authority and power. So he added other factors that led to fraud, namely arrogance and ability which became known as the fraud pentagon. The results of the ACFE survey of fraud were mostly carried out by the owners or the executives of the company themselves because their sense of ego and arrogance created an opinion that felt that the company's internal control would not affect its authority and power.

With good self-control in someone, either an employee or management party, it will not cause cheating. Because cheating will happen to the right person and of course the ability is supported. The ability element can be used to assess the risk of fraud because a person's position provides the ability to control pressure, take advantage of opportunities and also ensure the rationalization of fraudulent acts. (Wolfe & Hermanson, 2004). A person with the ability will generate arrogance on his ability Ego, therefore there is an additional factor from the previous theory, namely arrogance which is commonly known as the fraud pentagon theory (pressure, opportunity, rationalization, capability, and arrogance).

Pressure a strong motivation to achieve a goal, but limited by ability. The impulse of pressure that causes fraud can occur due to financial or non-financial factors (Sihombing & Rahardjo, 2014) (Triyanto, 2019) In the companies that will be studied in this study the pressure will be conditioned from financial targets. Financial targets (ROA) arise from management pressure on something to achieve company targets.

Opportunity is a condition that can be used to commit fraud without being recognized. Opportunities will arise because of circumstances that provide opportunities to commit fraud. Opportunities in this research will be illustrated by the effectiveness of supervision, companies with good surveillance effectiveness will minimize the occurrence of fraud.

Rationalization is a self-justification that feels reasonable to commit fraud (Albrecht, et al., 2012) (Triyanto, 2019), usually, because their actions are commonplace in the environment and are considered normal, such as going along with what was done by previous employees. externals in the company's financial statements.

Capability is a complementary factor to Cressey's three factors. Ability is a person's power to commit fraud in the company (Wolfe & Hermanson, 2004). Changes in the board of directors in a company are usually full of political content and tend to prioritize the interests of certain parties. This will increase the ability to commit fraud, so this research will assess changes in directors as a determining factor inability.

Arrogance is a superior trait of rights and feels that internal control and company policies will not apply to him. Arrogance is usually shown by someone in a high position. This research will represent arrogance by ownership of management, where there are management companies that own shares in the company.

Fraud that is growing very rapidly will become a big scandal that harms many parties. The Fraud Score Model or often called the F-Score can be used to detect misstatements or fraud. The F-Score is assessed by the value of accrual quality as proxied by RSST and financial performance proxied by changes in accounts receivable, changes in inventory accounts, changes in cash sales accounts, and changes in EBIT. The use of the fraud score model can determine the average F-Score and standard deviation for its application in various countries, or various sectors within the same country (Hanum & Nurthyasa, 2014). If the average F-Score is lower than one, the risk of financial statement fraud is low or normal. If there is more than one, the risk of financial statement fraud is high. Based on the background of the problem, the problem statement in this study is:

1. Does the pressure as measured by external targets affect fraudulent financial statements?
2. Does the opportunity measured by the effectiveness of supervision affect fraudulent financial statements
3. Whether the rationalization as measured by changes in external auditors affects fraudulent financial statements
4. Whether the ability as measured by changes in the board of directors affects fraudulent financial statements.
5. Does arrogance as measured by management ownership affect fraudulent financial statements?

METHODS

Based on the method, this research is a quantitative study. Quantitative research is a research method based on the philosophy of positivism, used to examine a specific population or sample, data collection using research instruments, quantitative/statistical data analysis, to test predetermined hypotheses. Based on the objective, this research includes descriptive research, namely research that describes an event systematically and as it is to obtain information when doing

This study uses two variables, namely the independent variable developed from the five components of the fraud pentagon, consisting of pressure, opportunity, rationalization, capability, and arrogance. And the dependent variable is fraudulent financial statements

The pressure is a strong motivation to achieve a goal but limited by ability. The impulse of pressure that causes fraud can occur due to financial or non-financial factors

(Sihombing & Rahardjo, 2014) In the companies that will be studied in this study the pressure will be conditioned from financial targets. Financial targets (ROA) arise from management pressure on something to achieve company targets.

Opportunity is a condition that can be used to commit fraud without being recognized. Opportunities will arise because of circumstances that provide opportunities to commit fraud. Opportunities in this research will be illustrated by the effectiveness of the supervision of independent commissioners. In this study, the effectiveness of supervision will be proxied by IND.

Rationalization is self-justification, which arises from the attitude and character that justifies doing wrong things. This self-righteous act arises as a result of individuals who have low integrity, giving rise to a mindset that thinks that committing cheating is normal. Auditor changes that occur in the company are considered a way to eliminate traces of fraud. (Sihombing & Rahardjo, 2014) explain that the changing behavior of independent auditors can cover up the fraud. Changes in auditors are proxied by changes in public accounting firms as measured by dummy variables.

The ability is added by Wolfe and Hermanson (2004) to complement the factors that have been expressed by Cressey (1953). Without the proper abilities possessed by individuals, cheating will not occur because details are needed in its implementation. Ability is an effort to achieve a goal by committing cheating. In this study, the ability is proxied by a change of directors (DCHANGE) using a dummy.

Arrogance is an additional factor that complements Cressey's (1953) fraud triangle and Wolfe and Hermanson's (Wolfe & Hermanson, 2004) fraud diamond. Arrogance is a characteristic of an individual who feels that internal control and company policies will not apply to him (Marks, 2011). The outline of competence is the same as the ability in diamond fraud (Wolfe DT, 2004). Competence is a person's ability to manipulate internal controls, develop sophisticated healing strategies and self-beneficial social control (Marks, 2011)

Arrogance is usually shown by someone in a high position. This research will represent arrogance by ownership of management, where there are management companies that own shares in the company. Management ownership by a party can be used to commit fraud because of the status and position that supports committing fraud. Management ownership is proxied by share ownership by the management, if there is share ownership by the management during the period, it will be given a value of 1, otherwise, it will be given a value of 0.

In this study, researchers used the risk level of financial statement fraud as the dependent variable. The variable is calculated using a nominal scale (dummy), namely by giving 1 for companies that have detected the Fraud Score Model and 0 for those that are not detected by the fraud score model. How to calculate the fraud score model in the financial statements by adding up accrual quality with financial performance

The research method uses descriptive verification method with the quantitative approach is a method that aims to get a description of the characteristics of the variables

under study by testing the truth of a hypothesis determined through data collected from the field in the form of a population or a sample determined by collecting data using research instrument, data analysis is quantitative. This method is used to test the effect of objectivity, integrity, competence on the quality of internal audits. As well as testing of each hypothesis that has been determined, the hypothesis is accepted or rejected.

Operationalization of the variables in this study are

1. Financial pressure has a positive effect on fraudulent financial statements.
2. The effectiveness of supervision has a positive effect on fraudulent financial statements.
3. The change of auditors has a positive effect on fraudulent financial statements.
4. Changes in directors have a positive effect on fraudulent financial statements.
5. Share ownership has a positive effect on fraudulent financial statements.

The population in this research is BUMN in Indonesia. The method of sampling in this study is to use purposive sampling with the criteria in this study are as follows:

1. State-owned companies listed on the IDX in 2015-2019.
2. Registered state-owned companies have been exposed to corruption cases during this period.
3. Publish annual reports and complete financial reports for the period 2015-2019.
4. Issuing annual reports and complete financial reports in Rupiah for the period 2015-2019.
5. Companies that carry data related to research variables and are completely available.

The type of data used in this study is the primary data source. Primary data, in this study used in the form of a data collection, is carried out to obtain all necessary matters related to research following its scope to answer existing problems. In this study, the authors used secondary data. Secondary data is data that already exists and does not need to be collected by researchers themselves, some secondary data sources include statistical bulletins, government publications, information published or published from within or outside the company, available data from previous research, case studies, and library documents. , online data, websites, and the internet. The data were processed using the Statistical Package for Social Sciences (SPSS) program.

RESULTS AND DISCUSSION

For the model to fit the data then H_0 must be accepted. The statistics used are based on likelihood. The likelihood L of the model is the probability that the hypothesized model describes the input data. To test the null and alternative hypotheses, L is transformed into $-2\text{Log}L$. The $-2\text{Log}L$ statistic is used to determine whether the model gets better if the independent variables are added

Table 1. Overall Model Fit Test

Information	-2 Log Likelihood
Step 0	30,570
Step 1	25,087

Source: Secondary data processed by SPSS

In table 1 above, the feasibility test is shown by taking into account the numbers at -2 Log-Likelihood (LL) Block Number = 0, which is 30.570, and the number at -2 Log-Likelihood (LL) Block Number = 1, which is 25.087. This shows that there is a difference between the two Likelihood logs, meaning that the addition of independent variables to the fit model can improve the fit model. Likelihood reduction shows a good logistic regression model, or in other words, the hypothesized model is fit with the data.

Assessing the Feasibility of a Regression Model This test is used to measure the feasibility of the model for use in research. This test is assessed based on the value of the Hosmer and Lemeshow Test. The null hypothesis is accepted if the value Prob> 0.05. The null hypothesis states that there is no difference between the observed values and the model or it can be interpreted that the model is fit.

Table 2. Hosmer and Lemeshow Test

<i>Step</i>	<i>Chi-square</i>	<i>Df</i>	<i>sig</i>
1	4,432	8	,816

Source: Secondary data processed by SPSS

Based on the results of the Hosmer and Lemeshow Test in table 2, the significance value is 0.816. This value is greater than 0.05 which means that the regression model can be used in this study and is suitable for use in further analysis.

Testing the coefficient of determination aims to determine how much influence the independent variables involved in the study have on the dependent variable. The value of the coefficient of determination is determined based on the Nagelkerke R Square value.

Table 3. Nagelkerke R Square

<i>Step</i>	<i>-2LL</i>	<i>Cox&snellR Square</i>	<i>NagelkerkeR Square</i>
1	25,087	.320	.454

Source: Secondary data processed by SPSS

Based on the data in table 4.9, the Nagelkerke R Square value is 0.454. This means that the combination of the factors of pressure, opportunity, rationalization, ability, and arrogance can explain the detection of financial statement fraud variables by 45%. Meanwhile, 55% of the detection of financial statement fraud was explained by other factors

This partial hypothesis testing uses logit regression with the enter method with the significance level (α) of 5% to see the effect of each independent variable, namely the dependent variable. If the probability <0.05, then the variable X individually (partially) has a significant effect on variable Y. Conversely, if the probability > 0.05, then variable X

individually (partially) does not have a significant effect on variable Y. Results in partial hypothesis testing is presented in the following table

Table 4. Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp (B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1 ^a	ROA	-,066	,054	1,467	1	,226	,937	,842	1,041
	IND	9,157	4,633	3,907	1	,048	9484,336	1,080	83276369,998
	AUDCH	-1,213	1,074	1,274	1	,259	,297	,036	2,443
	DCAN	-1,460	,791	3,404	1	,065	,232	,049	1,095
	KSAH	-,465	,655	,504	1	,478	,628	,174	2,268
	Constant	-2,260	1,148	3,874	1	,049	,104		

Source: Data processed using SPSS

Based on the data in table 4. ROA is the ratio of the company's income to its total assets. The logistic regression test results showed a significance value of $0.226 > 0.05$. Also, the positive regression coefficient of the ratio of earnings after tax to total assets indicates that with every increase in one unit of ROA with the assumption that the other indicators are constant, then the possibility of companies committing fraud in financial statements will increase by 0.842.

The logistic regression test results show that the ratio of profit after tax to total assets has no significant effect on fraudulent financial statement detection. This is different from the hypothesis built, where the ratio of profit after tax to total assets affects the detection of fraudulent financial statements. This study failed to prove the effectiveness of the ratio of profit after tax to total assets on the detection of fraudulent financial statements.

The independent commissioner ratio indicator measures the ratio between the number of independent commissioners and the total board of commissioners of a company. The logistic regression test results showed a significance value of $0.048 < 0.05$. Also, the positive regression coefficient shows that for each increase in one unit of the indicator for the ratio of independent commissioners with the assumption that other indicators are constant, the possibility of the company committing fraud in financial statements has increased by 1,080.

The results of the logistic regression test show that the independent commissioner ratio indicator has a significant effect on the detection of financial statement fraud. These results are following the hypothesis that was built, in which the value of a large ratio of independent commissioners will increase the possibility of the company committing fraud in financial statements. The rationalization factor is measured using the indicator of external auditor turnover. The logistic regression test results showed a significance value of $0.259 > 0.05$. Besides, the regression coefficient

is positive, indicating that any increase in the turnover of external auditors with the assumption that other variables are constant, the possibility of the company committing fraud in financial statements has increased by 0.036.

The logistic regression test results show that the indicator of external auditor turnover does not have a significant effect on the detection of fraudulent financial statements. This study failed to prove the effect of changing external auditors on the detection of financial statement fraud. This is different from the hypothesis that was built, where the change in external auditors can detect fraudulent financial statements

Capability is measured using indicators of changes in directors that occur in the company during the research year. The logistic regression test results showed a significance value of $0.65 > 0.05$. Besides, the regression coefficient is positive, indicating an increase in the change of directors with the assumption that other variables are constant, then the possibility of the company committing fraud in financial statements has increased by 0.049

The logistic regression test results show that the change of directors indicator does not have a significant effect on the detection of fraudulent financial statements. This study fails to prove the effectiveness of a change of directors on the detection of financial statement fraud. This is different from the hypothesis that was built, where the change in external auditors can detect report fraud finance. The more often the company changes the board of directors, the lower the possibility of the company committing fraud in financial statements.

Arrogance is measured by the presence or absence of members of the board of directors and commissioners who own shares in the company. The results of the logistic regression test showed a significance value of $0.628 > 0.05$. Besides, the regression coefficient is positive, indicating that with each increase in share ownership by the directors assuming other variables are constant, the possibility of the company committing fraud in financial statements has increased by 0.174.

The logistic regression test results show that the share ownership indicator does not have a significant effect on the detection of fraudulent financial statements. This study failed to prove the effect of share ownership on the detection of fraudulent financial statements. This is different from the hypothesis that was built, where share ownership can detect fraudulent financial statements. The more parts of the company directors owning shares in the company the higher the chances of the company's fraud report finance.

CONCLUSION

Based on the previous explanation, it can be concluded that financial pressure, rationalization, opportunity, and arrogance did not affect the fraud in financial statements, while the effectiveness of supervision affected fraudulent financial statements.

REFERENCES

- Siddiq, R., Achyani, F., & Zulfikar. (2017). Fraud Pentagon Dalam Mendeteksi Financial Statement. *Seminar Nasional Dan the 4Th Call Syariah Paper, ISSN 2460-0784*, 1–14. <http://hdl.handle.net/11617/9210>
- 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>
- Triyanto, D. N. (2019). Fraudulence Financial Statements Analysis using Pentagon Fraud Approach. *Journal of Accounting Auditing and Business*, 2(2), 26. <https://doi.org/10.24198/jaab.v2i2.22641>
- Wolfe, D. T., & Hermanson, D. R. (2004). The FWolfe, D. T. and Hermanson, D. R. (2004) 'The Fraud Diamond : Considering the Four Elements of Fraud: Certified Public Accountant', *The CPA Journal*, 74(12), pp. 38–42. DOI: DOI: fraud Diamond : Considering the Four ElemWolfe, D. T. and Hermanson, D. R. *The CPA Journal*, 74(12), 38–42.
- Siddiq, R., Achyani, F., & Zulfikar. (2017). Fraud Pentagon Dalam Mendeteksi Financial Statement. *Seminar Nasional Dan the 4Th Call Syariah Paper*, ISSN 2460-0784, 1–14. <http://hdl.handle.net/11617/9210>
- 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>
- Triyanto, D. N. (2019). Fraudulence Financial Statements Analysis using Pentagon Fraud Approach. *Journal of Accounting Auditing and Business*, 2(2), 26. <https://doi.org/10.24198/jaab.v2i2.22641>
- Wolfe, D. T., & Hermanson, D. R. (2004). The FWolfe, D. T. and Hermanson, D. R. (2004) 'The Fraud Diamond : Considering the Four Elements of Fraud: Certified Public Accountant', *The CPA Journal*, 74(12), pp. 38–42. DOI: DOI: fraud Diamond : Considering the Four ElemWolfe, D. T. and Hermanson, D. R. *The CPA Journal*, 74(12), 38–42.
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