The Influence Of Fraud Hexagon Elements On Fraudulent Financial Reporting At The Banking Companies Listed On The Indonesian Stock Exchange Periode 2018-2020

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ABSTRACT

Fraudulent financial reporting has become a common thing that occurs in many Indonesian institutions. This research aims to detect the fraudulent in financial reporting using hexagon fraud analysis. In this research, the dependent variable is measured using the F-Score Model to set the potential for fraudulent financial reporting. The sample is selected using a purposive sampling technique, with the criteria of banking companies listed on the Indonesia Stock Exchange in 2018 - 2020 which reported their financial statements in Rupiah currency. This research uses a quantitative method supported by the logistic regression analysis technique. The hypothesis testing is done using the Wald test and the Omnibus Test of Model Coefficients. The results show that the stimulus factor proxied by financial stability (X1), personal financial needs (X2), external pressure (X3) and financial target (X4), capability factor proxied by the change in director (X5), and collusion factor proxied by e-procurement (X6), opportunity factor proxied by effective monitoring (X8), and ego factor proxied by the frequent number of CEO's Picture (X10) significantly influence the fraudulent financial statements partially or simultaneously. Meanwhile, the opportunity factor proxied by nature of the industry (X7) and rationalization factor proxied by the change in auditor (X9) does not affect the company's decision to commit fraudulent financial reporting.

Keywords: Fraud Hexagon Elements, Fraudulent Financial Reporting

INTRODUCTION

The 2020 Global Association of Certified Fraud Examiners (ACFE) reports that every year an average of 5% of the organization's revenue has suffered from losses due to the fraud in their financial reporting. According to the ACFE, in 2020 the total losses caused by fraud reached USD 3.6 billion with an average loss of USD 1,509,000 per case. The most common fraud is asset abuse with 86% of cases, followed by corruption (43%). The fewest case is fraudulent
financial reporting which only covers 10% but has the greatest loss impact among all fraud cases.

The ACFE 2020 also shows a fact that the banking sector has experienced the most cases of fraud compared to others. This can be seen in the image below:

![Figure 1.1 Industry of Victim Organization](http://www.webology.org)

The increasing number of cases of accounting scandals has caused other parties to speculate that management has committed fraud in its financial statements (Skousen, Wright, & Kevin, 2009). During the auditing process, audit professionals always try to detect fraudulent activities in a company. However, some fraud scandals may escape auditors’ scrutiny. The American Institute of Certified Public Accountants (AICPA) as a professional public accountant organization has responded to the fraud cases by issuing a standard in financial reporting. Initially, SAS number53 was issued in 1988, and then it was updated with SAS number 82 The SAS number 99 explains that an auditor must be able to obtain reasonable assurance that material misstatements in financial reporting can be detected, including those caused by fraud. Furthermore, Cressey (1953) in Skousen (2009) explained that the auditor must assess the risk...
of material misstatement in the financial reporting for fraud and consider the estimated risk in designing audit procedures. When assessing risk, the auditor should also consider fraud risk factors based on fraud risk theory. The SAS number 99 stated that these factors consist of pressure, opportunity, and rationalization. The three are commonly called the fraud triangle.

Then, Wolfe and Hermanson (2004) developed the fraud triangle by adding the fourth element, namely "capability" which is known as the fraud diamond. Wolfe and Hermanson (2004) believed that fraud would not occur if there are no capable people. In 2011, Jonathan Marks developed a fraud model called The Crowe's Fraud Pentagon by adding two other fraud factors, namely competence and arrogance. Competence means ability previously described in the fraud diamond theory by Wolfe and Hermanson. The latest fraud model was put forward by Georgios L. Vousinas in 2019, known as the Hexagone fraud theory or S.C.C.O.R.E, where this theory updates a previously existing theory by adding a collusion factor.

Based on the above background, objectivities of research to analyze there any influence of Stimulus factors in the categories of Financial Stability, Personal Financial needs, External Pressure, and Financial Target on Fraudulent Financial Reporting; there any influence of the Capability factor with the Change in Director Category on Fraudulent Financial Reporting; there any influence of the Collusion factor on Fraudulent Financial Reporting; there any influence of Opportunity factor in the category of Nature of Industry and Effective Monitoring on Fraudulent Financial Reporting; there any influence of the Rationalization factor with the Change in Auditor category on Fraudulent Financial Reporting; there any influence of the Ego factor with the Frequent Number of CEO's Picture category on Fraudulent Financial Reporting.

**LITERATURE STUDY**

There are pro and contra finding research previous, like Bambang Leo Handoko, Dessy Tendean (2021) founded Financial target, External pressure, ineffective monitoring, ineffective monitoring, change in auditor, change in director, and the Frequent number of CEOs' pictures do not influence the fraudulent financial reporting (FFR). Collusion significantly influences FFR; Dianing Ratna Wijayani, Dwi Ratmono (2021) founded Financial targets, auditor's opinion, change in directors, the proportion of the independent commissioners and frequent number of CEO’s influence FFR, financial stability, liquidity, external pressure, institutional ownership, ineffective monitoring, quality of external auditor, nature of the industry, change in auditor, total accrual ratio, duality CEO and collusion do not influence FFR; Ryan Aviantara (2020) conclusion that Financial stability, a director change, audit fee, e-procurement, change in audit committee, whistleblowing system, and government ownership influence FFR, CEO education, and CEO military do not influence FFR;


For this reason author interesting to analyze similar themes, to prove that hexagonal elements influence fraudulents financial reports.

Fraudulent Financial Reporting

The Statement of Auditing Standards number 99 defined fraudulent financial reporting as an intentional act to produce a material misstatement in the financial reporting as the subject of the audit. Fraudulent financial reporting occurs because of the lack of clarity in the separation of duties and responsibilities of each party in the company, which triggers speculation for manipulation, collusion, and corruption for personal gain. Flexibility in accrual recording that is adjusted to accounting standards allows the company management to regulate profitable aspects to set the condition and performance of the company to always seem good (Khrisnan, 2003). The accrual recording system provides an opportunity for the management to manipulate the earnings (Khrisnan, 2003). DeAngelo LE., 1986)

Fraud Hexagon

The concept of the fraud triangle or better known as the Fraud Triangle Theory is proposed by (Cressey, 1953). He concluded that some factors that enforce fraud are pressure, opportunity, and rationalization. In subsequent developments, the concept of the fraud triangle has become the basis for identifying risk factors in fraudulent financial reporting and has been adapted by some auditing standards regarding fraud detection (i.e. SAS number 82, ISA 240, and SAS number 99). According to SAS number 99, four pressures can cause someone to be involved in fraud, namely financial stability or profitability, external pressure, personal financial need, and financial targets, Wolfe and Hermanson (2004) proposed ideas and concepts regarding the fraud phenomenon known as the Fraud Diamond Theory which is a refinement of the fraud triangle theory by adding the capability which is used as a risk factor that encourages someone to commit fraud. This theory was further developed by Jonathan Marks who was a partner in charge of fraud and ethics practice at Crowe Horwath LLP in 2011 by adding two other elements of fraud, namely competence and arrogance so that the latest theory is called Crowe's Fraud Pentagon Theory.

Vousinas (2019) explained that collusion is a vital element in many cases of fraud and white-collar crime. When the collusion occurs, honest employees will participate in fraud due to supportive environmental factors. This pushes a dishonest environment to develop into a culture that is difficult to eliminate. Allan (2003) in Vousinas (2019) stated that a person with a persuasive personality can more easily invite his colleagues to commit fraud. Collusion also often occurs because of pressure from superiors to subordinates. Anti-fraud control systems often work based on segregation of duties and independent inspections, but this pattern will not work effectively if there is collusion or fraud that is carried out collaboratively. Vousinas then
developed the theory of fraud pentagon by adding a new component i.e. collusion from the SCORE to the SCCORE model.

![Fraud Hexagon](https://www.webology.org)

**Figure Fraud Hexagon (Georgios Vousinas, 2019)**

Based on the description above, the proposed hypothesis are

H1: Financial Stability influences Fraudulent Financial Reporting
H2: Personal Financial Need influences Fraudulent Financial Reporting
H3: External Pressure influences Fraudulent Financial Reporting
H4: Financial Target influences Fraudulent Financial Reporting
H5: Changes in Director influence Fraudulent Financial Reporting
H6: E-Procurement influences Fraudulent Financial Reporting
H7: Nature of Industry influences Fraudulent Financial Reporting
H8: Effective Monitoring influences Fraudulent Financial Reporting
H9: Change in Auditor influences Fraudulent Financial Reporting
H10: Frequent Number of CEO’s Picture influences Fraudulent Financial Reporting

**RESEARCH METHODS**

This research uses descriptive analysis with a quantitative approach and verification methods. The research data used are secondary. The secondary data cover financial statements and annual reports obtained from the IDX's official website (www.IDX.co.id) as well as the official websites of related companies. The samples are selected using the purposive sampling method. This research hypothesis will be examined using logistic regression analysis.

**RESULTS AND DISCUSSIONS**

**Results**

Goodness of Fit Test the Chi-Square value in Hosmer and Lemeshow's Godness of Fit Test is 2.981 with a significance value of 0.936 because the significance value of Hosmer and Lemeshow's Godness of Fit Test is higher than 0.05. Therefore, it can be concluded that the logistic regression model is acceptable and feasible to be used for subsequent analysis or that the empirical model obtained is following the theoretical model.
The value of Negelkerke's R square can be interpreted the same as the value of $R^2$ in linear regression. It can be seen in the table that the value of Negelkerke's R square is 0.370. This data shows that the variables of Financial Stability, Personal Financial Need, External Pressure, Financial Target, Change in Director, Collusion, Nature of Industry, Effective Monitoring, Change in Auditor and the Frequent number of CEO's Picture can simultaneously explain the companies in committing Fraudulent Financial Reporting on the banking companies listed on the Indonesia Stock Exchange from 2018-2020 by 37%, while the remaining 63% can be explained by other variables outside the research model.

The table shows an overall percentage value of $(111+5)/129 = 89.9\%$, which means that the accuracy of this research model is 89.9%. The value of the regression coefficient (B) can be applied into a functional equation with the logistic model as follows:

$$Y = 6,455 + 1,323X_1 - 2,253X_2 + 1,114X_3 - 1,200X_4 + 2,263X_5 - 1,177X_6 + 1,800X_7 + 1,560X_8 - 1,176X_9 + 1,297X_{10} + \epsilon$$

A company is predicted to commit Fraudulent Financial Reporting if $P$ is higher than 0.05. The independent variable of Financial Stability has a significance value of 0.007; then the variable of Personal Financial Need obtains a significance value of 0.015; External Pressure gets a significance value of 0.005; next, the Financial Target obtains a significance value of 0.008; the Change in Director obtains a significance value of 0.012; the variable of Collusion obtains a significance value of 0.002; Nature of Industry obtains a significance value of 0.602; then the Effective Monitoring variable obtained a significance value of 0.009; then, the Change in Auditor has a significance value of 0.802, and the Frequent number of CEO's Picture variable obtains a significance value of 0.040.

After obtaining the prediction, the next step is conducting a test to prove whether the ten independent variables included in the model influence the Fraudulent Financial Reporting.

**Discussion**

Based on the table of Variables in the Equation, the results of hypothesis testing can be described in the following section:

The Financial Stability (ACHANGE) has a Wald value of 7.214 with a significance level of 0.007 which is lower than the significance level used as the criteria for acceptance of the null hypothesis (0.05). Therefore, it can be concluded that $H_1$ is accepted, which means that Financial Stability influences Fraudulent Financial Reporting. This is in line with the finding of research (Skousen, Wright, & Kevin, 2009) where when a company experiences below-average industry growth, management has the potential to manipulate its financial statements to look better than the actual condition.

The Personal Financial Need (PFNP) has a Wald value of 5.928 with a significance level of 0.015 (lower than the significance level used as the criteria for acceptance of the null hypothesis i.e. 0.05). Therefore, it can be decided that $H_2$ is accepted, meaning that Personal Financial Need influences Fraudulent Financial Reporting. This is in line with the finding of research (Skousen, Wright, & Kevin, 2009) that the percentage of share ownership by insiders significantly influences fraudulent financial reporting.
The External Pressure (LEV) has a Wald value of 7.808 with a significance level of 0.005 which is lower than the significance level used as the criteria for acceptance of the null hypothesis (0.05). Therefore, it can be stated that $H_3$ is accepted. It means that External Pressure influences Fraudulent Financial Reporting. This is in line with the finding of research (Skousen, Wright, & Kevin 2009) which shows that the percentage of total debt to total assets influences fraudulent financial reports.

The Financial Target (ROA) has a Wald value of 0.079 with a significance level of 0.008 (lower than the significance level used as the acceptance criteria for the null hypothesis, which is 0.05). Thus, it can be stated that $H_4$ is accepted. It means that the Financial Target influences Fraudulent Financial Reporting. This is in line with the finding of research (Summers and Sweeney, 1998) which states that the companies that commit fraud tend to have lower ROA than those that do not commit fraud. Higher ROA in the previous years shows higher profitability so that the profit target to be obtained in the following year is also high (Norbarani, 2012)

The Change in Director (DCHANGE) has a Wald value of 0.136 with a significance level of 0.012. It is lower than the significance level used as the acceptance criterion for the null hypothesis, which is 0.05. Therefore, it can be decided that $H_5$ is accepted. This means that Change in Director influences Fraudulent Financial Reporting. This finding is similar to research (Handoko, 2021) which stated that Change in Director is considered to cause a stress period which triggers a higher possibility of fraudulent financial reporting. This is because the new directors still need time to learn and adapt to the company's business processes, so they are controlled used by certain parties to commit fraudulent financial reporting.

The Collusion (EPROC) has a Wald value of 1.066 with a significance level of 0.002. It is lower than the significance level used as the acceptance criterion for the null hypothesis i.e. 0.05. Thus, it can be decided that $H_6$ is accepted, meaning that Collusion influences Fraudulent Financial Reporting. This finding is the same with research (Haryati, Anditya, & Wibowo, 2011) which stated that e-procurement can effectively prevent fraud. Collusion practices often occur through the procurement process with a tender mechanism where the parties involved manipulate prices or reduce the quality of products or services (OECD, 2009)

The Nature of Industry (ARECEIVABLE) has a Wald value of 0.272 with a significance level of 0.602. It is higher than the significance level used as the acceptance criteria for the null hypothesis, which is 0.05. Therefore, it can be stated that $H_7$ is rejected, which means that the Nature of Industry does not influence Financial Fraudulent Reporting. It is in line with research (wijayani & Ratmono, 2020) which stated that this condition may occur possibly because the ratio of changes in receivables during the research period does not motivate the management to commit fraudulent financial reporting. Besides, the system of internal control and supervision in banking companies for accounts that require subjective justification can also be classified as very good. Summers and Sweeney (1998) stated that receivables and inventories require subjective assessment and they must be fully paid attention to because they often become the objects of manipulation of financial statements.

The Effective Monitoring (BDOUT) variable has a Wald value of 0.019 with a significance level of 0.009. It is lower than the significance level used as the criteria for acceptance of the null hypothesis (0.05). Thus, it can be decided that $H_8$ is accepted, meaning that Effective
Monitoring influences Fraudulent Financial Reporting. This is similar to research (Tiffani, Laila, & Marfuah, 2015) which showed that having an independent board of commissioners from the outside of the company will increase the effectiveness of supervision over management. The Change in Auditor (CPA) has a Wald value of 0.063 with a significance level of 0.802, which is higher than the significance level used as the acceptance criteria for the null hypothesis, i.e. 0.05. Therefore, it can be declared that $H_0$ is rejected, which means that Change in Auditor does not influence the company's decision to commit Fraudulent Financial Reporting. This is in line with research (Handoko & Tandean, 2021) which stated that a change in auditor cannot be an indicator that the company is trying to cover up the previous auditor's findings. Changes in auditors may happen due to the enactment of government regulation number 20/2015 article 11 paragraph (1) concerning the Practice of Public Accountants which explains that KAP is no longer limited to auditing a company. However, the limitation only applies to AP for five consecutive financial years.

The Frequent Number of CEO's Picture (PICTCEO) has a Wald value of 3.526 with a significance level of 0.040, which is lower than the significance level used as the acceptance criterion for the null hypothesis (0.05). It can be concluded that $H_{10}$ is accepted, and it means that the Frequent Number of CEO's Picture influences the company's decision to commit Fraudulent Financial Reporting. This is in line with research (Wijayani & Ratmono, 2021) which explained that the number of CEO photos listed in the annual report illustrates their level of arrogance and superiority. This high level of arrogance makes them feel that they play the most important role in the company so that they can freely commit fraud.

**CONCLUSION AND RECOMMENDATION**

**Conclusion**

This research aims to analyze the elements of the hexagon fraud model from Vousinas (2019) in detecting fraudulent financial reporting in banking companies listed on the IDX during the 2018-2020 period. The fraud hexagon element is SCCORE, with the Stimulus factor proxied by financial stability (X1), personal financial needs (X2), external pressure (X3) and financial target (X4), the Capability factor proxied by the change in director (X5), the collusion proxied by e-procurement (X6), opportunity factor proxied by effective monitoring (X8) and ego factor proxied by the frequent number of CEO's Picture (X10) affect fraudulent financial reporting partially or simultaneously. Meanwhile, the opportunity factor which is proxied by the nature of the industry (X7), and the rationalization factor proxied by the change in auditor (X9) does not influence fraudulent financial reporting.

**Recommendation**

In connection with audit procedures, the auditor should include some elements of the fraud hexagon in the list of questions at the first meeting as an initial step to detect fraud risk (fraud risk assessment). The stakeholders can also take advantage of testing on these elements to get clear signals on fraudulent financial reporting. Although there are still many weaknesses, the
findings of this research can also support the development of further research, because different types of samples may generate different results.

REFERENCES


