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# FRAUD PENTAGON THEORY FOR DETECTING FINANCIAL STATEMENT FRAUD IN BANKING INDUSTRY

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**ABSTRACT**

*Financial statement fraud is an intentional misstatements, omissions or disclosure in financial statement done by an individual or a party to mislead financial statement users when making decisions. Financial statement fraud committed by irresponsible parties for their own advantage can lead to long-term losses. The purpose of this study is to examine the effects of fraud pentagon theory for detecting financial statement fraud in banking companies listed in the Indonesia Stock Exchange for 2020-2022 period. This study was analysed using multiple regression research method which processed using SPSS 25. The data used in this study was secondary data from financial statement and annual reports. This study used purposive-sampling technique with sample of 90 data observations. The results of this study shows that financial stability and changes in auditor have a significant and negative effect on financial statement fraud. Meanwhile external pressure, monitoring effectiveness, changes in director, and frequent number of CEO's picture in annual report have no significant effects on financial statement fraud.*

***Keywords:*** *Fraud Pentagon Theory, Financial Statement Fraud, Pressure, Opportunity, Rationalization, Competence, Arrogance*

## 1. INTRODUCTION

The high economic growth, supported by factors such as a strategic location for export import, abundant natural resources, a substantial consumer market, and a strong labor force, makes Indonesia a highly potential country for investors to invest in. According to Badan Pusat Statistik (BPS) Indonesia has reached 5,3% economic growth in 2022 which is high compared to other countries. Investment is the purchase of assets with the expectation of earning a return in the future can be in the form of income, such as dividends or interest, or capital appreciation, such as an increase in the value of the asset [1]. One of the indicators that investors can use in decision-making is financial statements. The importance of financial statements in making economic decisions for various stakeholders requires the accuracy and appropriate presentation of, but this situation is sometimes exploited by certain parties to commit fraud in financial statements in reflect the best condition of the company.

Fraud refers to any action or omission on purpose that results to material misstatements in financial statements or other records [2]. *The Association of Certified Fraud Examiners* (ACFE) classified fraud generally into 3 types which is corruption, asset misappropriation, and financial statement fraud. ACFE in 2022 disclose there were 2.110 of fraud related cases in 133 countries estimated to have caused losses exceeding $3.6 billion in 2022. Asset misappropriation was the most common type of fraud, which was 86% of the total cases, but it had the smallest median loss, which was $100.000. Financial statement fraud, despite representing the lowest percentage of cases at 9% of the total, had the highest median loss, amounting to $593.000 [3].

There were already many financial statement fraud cases occurred throughout history. One of the most famous case is Enron which involved one big Public Accountant Firm, Arthur Andersen in 2001 which included omission of debt and inflate the company's revenue in its financial statement. This scandal recorded as the largest loss in United States history with a total of $74 billion for its stakeholders and employees. Indonesia itself ranks fourth in Asia Pacific as country with the highest number of fraud cases, with 23 cases in 2022. Meanwhile the industrial sector which has the highest number of fraud cases is the financial services industry with a total of 351 cases [3].

Fraud cases in financial service industry often occur in Indonesia, especially in banking. Chair of Audit Board of OJK, Sophia Isabella Wattimena stated that from 2014 to 31 August 2023, the OJK had resolved a total of 108 cases in the financial services sector, including 83 banking cases, 5 capital markets cases and 20 NBFI cases. One of them is a case of manipulation of financial statements by Bank Bukopin which modified customer credit card data to show as if the bank's revenue was high in 2017. Not only that, Bank Bukopin also manipulated the addition of the balance of reserves for impairment losses for certain debtors in its subsidiary, Bank Syariah Bukopin.

The rise in fraud cases that occurred, especially after the Enron case, finally prompted the American Institute of Certified Public Accountants (AICPA) to issue Statement of Auditing Standards (SAS) No. 99 Consideration of Fraud in Financial Statement Audit replaces the previous regulation, namely SAS No. 82. The key difference is SAS No. 99 describes the characteristics of fraud referring to the fraud triangle theory proposed by Cressey (1953). SAS No. 99 requires the audit team to conduct "brainstorming" and consider the fraud triangle and areas that have the potential for material misstatement caused by fraud.

The fraud triangle, which was first introduced by Donal R. Cressey in 1953, explains three reasons why a person or organization commits fraud, namely opportunity, pressure and rationalization. The fraud triangle theory has also developed over time where David T. Wolfe and Dana R. Hermanson (2004) introduced the fraud diamond theory in the CPA Journal of December 2004. Wolfe and Hermanson (2004) [4] stated that there is one additional element that causes someone to commit fraud, namely capability. A person will have a small chance of committing fraud without the ability. Meanwhile, the fraud pentagon was developed by Jonathan Marks [5], a partner and leader at Crowe Horwath LLP, who added two additional elements to the fraud triangle, namely competence and arrogance. Arrogance itself is an attitude where a person feels that he is superior and powerful so that he thinks that internal control does not apply to him (Soneji, 2022) [6].

Utami and Pusparini (2019) [7] in their research have proven that changes in auditor, changes in director, and frequent number of CEO's pictures in annual reports have a significant influence on financial statement fraud, while financial stability and external pressure do not have a significant influence on financial statement fraud. This research contradicts with research conducted by Maharani (2018) [8] which proves that financial stability and external pressure have a significant influence on financial statement fraud. Himawan and Wijanarti (2020) [9] in his research proves that monitoring effectiveness has a significant influence on financial statement fraud. This is contrary to research conducted by Maharani (2018) [8] where monitoring effectiveness does not have a significant influence on financial statement fraud. Based on the inconsistency of the results of previous studies, researchers will conduct further research regarding the application of fraud pentagon theory through a study entitled "Fraud Pentagon Theory For Detecting Financial Statement Fraud in Banking Industry".

**Agency Theory**

Agency theory is a conceptual framework used to describe relationships between principals and agents. A principal is an entity that assigns tasks to an agent without the ability to directly monitor the agent's actions. Agency is a process of interest of rational actors (need, interest, and intention) which is intentionally to conduct effective plan and management for achieving goal [10]. Agency theory require principal to trust that the agent will act in their best interests. In economics, finance, and management, agency theory describes relationship between shareholders and managers of a corporation. Problem arises when there is difference in interest between principal and agent which called conflict of interest. Conflict of interest mainly occurs due to issue of information asymmetry between parties both inside and outside the company regarding the quality and quantity of data [11]. In this study information asymmetry happened when the management does any illegal action in order to represent the best condition of financial statement which lead to financial statement fraud [12].

***Fraud Pentagon***

As the number of fraud cases increased, auditor as an independent third party must take an important role in ensuring the true condition of financial reports representation. Auditor should be able to detect fraud so that the financial statement neutral and free of material misstatements. Auditor can use various of fraud theories in order to detect fraud [13]. This study use fraud pentagon theory, which is a developed theory from fraud triangle, as a guide to examine the effects on financial statement fraud. The Crowe's Fraud Pentagon is a developed theory from fraud triangle by a partner and leader at Crowe Horwath LLP. Fraud pentagon consists of 5 elements which is pressure, opportunity, rationalization, capability, and arrogance [5]. This theory added new elements based from fraud triangle theory, capability and arrogance. Horwath stated that individuals with arrogance are more likely to commit fraudulent activities, as they perceive their elevated positions as immunity from adhering to the rules.

***Financial Statement Fraud***

Financial statement fraud is an intentional act to change the information in financial statements in order to deceive users. Financial statement should presented fairly in accordance with the accounting principles and standards, therefore it should be free from errors and misinterpretation. Fraud here does not refer to unintentional errors, but instead intentional errors. Intentional errors occur when an individual or an organization change the true condition of information in financial statements for their own purpose to aim personal gain. If someone manipulates an account such as increasing revenue account or decreasing debt with intention to attract potential investors to invest in his company then it can be concluded as financial statement fraud. There is usually various types of fraud that occurs in financials statements which is falsification, alteration or manipulation of financial records, supporting documents or business transactions, and intentional omission of events, transactions, accounts or other significant information [13].

***The Effect of Financial Stability for Detecting Financial Statement Fraud***

The first element from fraud pentagon theory that can lead to financial statement fraud is pressure. Financial stability is a state where a company have a stable financial condition. Financial stability can put the management of a company works under substantial pressure as they are required to maintain exceptional performance. A decrease in total assets of a company could lead to financial statement fraud. When declining of stability happened, the management could be triggered to commit financial statement fraud as they are required to maintain exceptional financial performance. According on the results of the previous research by Nanda,

Zenita, and Salmiah (2019) [14] and Maharani (2018) [8] financial stability has a significant and negative effect on financial statement fraud.
H1: Financial stability has a significant and negative effect on financial statement fraud

***The Effect of External Pressure for Detecting Financial Statement Fraud***
External pressure also included as pressure element in fraud pentagon theory. External pressure is a pressure put on the management in order to meet the expectation of third party. When a company carries a significant high debt and risk of financial loss, there might be potential of financial statement fraud by the management because the company's requirement to generate substantial profits in order to reassure creditors of its ability to meet its debt obligations. This implicates that the higher leverage ratio of a company, it will increase the potentials of financial statement fraud. Based on the result from previous research by Himawan, and Wijanarti (2020) [9], external pressure has a significant and positive effect on financial statement fraud.
H2: External pressure has a significant and positive effect on financial statement fraud

***The Effect of Monitoring Effectiveness for Detecting Financial Statement Fraud***
The monitoring of a company usually carried out by an independent board of commissioners. The independent board of commissioners consists of individuals external to the company who are appointed by the company's owner to monitor its operations. The presence of an independent board of commissioners comprising external members can enhance the effectiveness of oversight, aiding the company in its efforts to prevent fraudulent activities [15]. Thus, a declining total of independent commissioners could indicate a weakness control in a company and lead to financial statement fraud. Based on the result from previous research by Himawan and Wijanarti (2020) [9] and also Putra dan Kusnoegroho (2021) [15] monitoring effectiveness has a significant and negative effect on financial statement fraud.
H3: Monitoring effectiveness has a significant and negative effect on financial statement fraud

***The Effect of Changes in Auditor for Detecting Financial Statement Fraud***
Rationalization is the process where someone performing an action and then generating beliefs and desires to provide justification for it [16]. Changes in auditor can indicate that there is a probability increase of failure in audit and litigation. Auditor is an independent third party to disclose any wrongdoings in a company. When multiple companies change auditors frequently, it may be suspected as an attempt to conceal any fraud [17]. If a company changes its external auditor, the new auditor may not have an in-depth understanding of the company which will be potentially allowed the management’s fraud to remain hidden more effectively [7]. According to the results of the previous study by Maharani (2018) [8] and Siddiq, Achyani, and Zulfikar (2017) [18] changes in auditor has an significant and positive effect on financial statement fraud.
H4: Changes in auditor has an significant and positive effect on financial statement fraud

***The Effect of Changes in Director for Detecting Financial Statement Fraud***
Competence is one of the element that is developed from fraud triangle. Competence, often referred to as competency, embodies a dynamic mixture of knowledge, skills, values, personal traits that define the educational or curriculum achievements and serve as the foundation for qualifications [19]. In this study competence was proxied by changes in director. Replacing directors can serve as a strategy to bring in more experienced individuals or to influence the company's political dynamics. However, this change in leadership is also viewed as having the potential to reduce efficiency, given the significant time required for the new board of directors to adapt to the company's specific circumstates [12]. According to the results of the previous

study by Utami and Pusparini (2019) [7] and Siddiq, Achyana, and Zulfikar (2017) [18] changes in director has a significant and positive effect on financial statements fraud.
H5: Changes in director has a significant and positive effect on financial statement fraud

***The Effect of Frequent number of CEO's Picture in Annual Report for Detecting Financial Statement Fraud***

The last element added to fraud pentagon theory is Arogance. The CEO's level of arrogance may contribute to an increased chance of fraudulent financial reporting. The annual report's inclusion of images and information regarding the CEO's track record can indicate the degree of arrogance and superiority possessed by the CEO. A CEO tends to be more inclined to showcase their power and career accomplishments within the company to the public. This is because they wish to maintain their status and position within the corporate management sphere, fearing any potential loss of recognition. Arrogance can lead to the occurrence of financial statement fraud through the utilization and exploitation of their authority. According to the results of the previous study by Utami and Pusparini (2019) [7] frequent number of CEO's picture in annual
report has a significant and positive effect on financial statement fraud.
H6: Frequent number of CEO's picture in annual report has a significant and positive effect on financial statement fraud.

## 2. RESEARCH METHOD

This study used a descriptive research design. The data type in this study is quantitative data. This study used secondary data from financials statements (www.idx.com) and annual reports (companies' website). This study was analysed using multiple regression research method which processed using SPSS 25.

***Variables and the Operationalization of the Variables***

The dependent variable used in this study is financial statement fraud which is proxied by discretionary accruals [7]. The method chosen for calculate discretionary accruals for banking companies was Modified Jones Model.

The operationalization of the variables and scales used in the variables is listed as follows:

Table 1. Operationalization of Variables

| Variable | Operationalization | Scale | Sources |
|---|---|---|---|
| Financial Statement Fraud | DA = TA - NDA | Ratio | Dechow et al. (1995) |
| Financial Stability (ACHANGE) | ACHANGE = (Total $Aset_t$ – Total $Aset_{t-1}$) / Total $Aset_{t-1}$ | Ratio | Skousen et al. (2008) |
| External Pressure (LEV) | LEV = Total $Debt_t$ / Total $Asset_t$ | Ratio | Skousen et al. (2008) |
| Monitoring Effectiveness (BDOUT) | BDOUT = $\sum Independent\ Commissioner$ / $\sum Commissioner$ | Ratio | Skousen et al. (2008) |
| Changes in Auditor (AUDCHANGE) | Dummy variable, code 1 if there is a change of auditor during the period of 2020-2022, 0 otherwise | Nominal | Skousen et al. (2008) |
| Changes in Director (DCHANGE) | Dummy variable, code 1 if there is a change of director during the period of 2020-2022, 0 otherwise | Nominal | Skousen et al. (2008) |
| Frequent Number of CEO's Picture (CEOPIC) | Total pictures of CEO in the annual report | Nominal | Horwath (2011) |

**Population and Sampling Techniques**

The population used in this study is all of banking companies that is listed on Indonesia Stock Exchange (BEI) in 2020-2022 period. Purposive sampling technique was applied within this study with criteria as listed below:

1) Banking companies listed on Indonesian Stock Exchange (BEI) in 2022
2) Banking companies which consistently are listed on Indonesian Stock Exchange (BEI) in 2020-2022.
3) Banking companies which already listed from 2019.
4) Banking companies which consistently published their audited financial report on Indonesia Stock Exchange (BEI) and annual report in 2020-2022
5) Banking companies which are not delisted on period 2020-2022.

**Analysis Method**

Multiple regression analysis was used in this study to test the effects of independent variables on the dependent variable. The multiple regression model can be seen as follows:

$$DACCit = \beta0 + \beta1ACHANGE + \beta2LEV + \beta3BDOUT + \beta4AUDCHANGE + \beta5DCHANGE + \beta6CEOPIC + \varepsilon$$

Notes:

| | |
|---|---|
| DACCit | : Discretionary accruals of company i year t |
| β0 | : Constants |
| β1- β6 | : Regression coefficients of each proxy |
| ACHANGE | : The ratio of change in total assets |
| LEV | : The ratio of total liabilities to total assets |
| BDOUT | : The ratio of independent commissioner to total commissioners |
| AUDCHANGE | : Changes in auditor |
| DCHANGE | : Changes in director |
| CEOPIC | : Number of CEO's picture |
| ε | : Error |

## 3. RESULTS AND DISCUSSION

**Descriptive Statistics**

**Table 2. Descriptive Statistics**

| | N | Min | Max | Mean | Std. Deviation |
|---|---|---|---|---|---|
| X1_ACHANGE | 90 | -0.10 | 0.60 | 0.12 | 0.129 |
| X2_LEV | 90 | 0.14 | 0.92 | 0.77 | 0.169 |
| X3_BDOUT | 90 | 0.00 | 1.00 | 0.56 | 0.149 |
| X4_AUDCHANGE | 90 | 0 | 1 | 0.42 | 0.497 |
| X5_DCHANGE | 90 | 0 | 1 | 0.63 | 0.485 |
| X6_CEOPIC | 90 | 1 | 5 | 3.36 | 1.174 |
| Y_DACCit | 90 | -0.44 | 0.28 | -0.02 | 0.116 |
| Valid N (listwise) | 90 | | | | |

From Table 2 above it can be seen that based from 90 sample of data used in this study had an average value and high standard deviation. Average value of financial stability (ACHANGE) is 0.12 with a standard deviation of 0.129. Average value of external pressure (LEV) is 0.77 with standard deviation of 0.169. The monitoring effectiveness (BDOUT) has an average value of 0.56 with a standard deviation of 0.149. Changes in auditor (AUDCHANGE) average value is 0.42 with standard deviation of 0.497. Changes in director (DCHANGE) has an average

value of 0.63 and standard deviation of 0.485. Frequent number of CEO's picture in annual report (CEOPIC) has an average value of 3.36 with standard deviation of 1.174. The descriptive statistic result for the dependent variable in this study shows an average value of -0.02 with standard deviation of 0.116.

Table 3.The results of One – Sample K-S Test

| | | Unstandardized Residual |
|---|---|---|
| N | | 90 |
| Normal Parameters[a,b] | Mean | 0.0000000 |
| | Std. Deviation | 0.10060368 |
| Most Extreme Differences | Absolute | 0.070 |
| | Positive | 0.070 |
| | Negative | -0.048 |
| Test Statistic | | 0.070 |
| Asymp. Sig. (2-tailed) | | 0.200 |

Normality test is used in purpose to test whether independent variables and dependent variables in a regression model have normal distribution. A normally distributed data should have a significant value greater than 0.05. Based on the results with Kolmogrov-Smirnov test, it can be seen that both independent and dependent variables have a significant value of 0.200 which indicate that the variables in this study is distributed normally.

Table 4. The results of multicollinearity test

| | Collinearity Statistics | |
|---|---|---|
| Variables | Tolerance | VIF |
| X1_ACHANGE | 0.907 | 1.103 |
| X2_LEV | 0.930 | 1.075 |
| X3_BDOUT | 0.905 | 1.105 |
| X4_AUDCHANGE | 0.981 | 1.019 |
| X5_DCHANGE | 0.970 | 1.031 |
| X6_CEOPIC | 0.934 | 1.071 |

The purpose of the multicollinearity test is to determine whether the regression model has detected correlations among the independent variables (Ghozali, 2013). A good regression model is one in which there are no issues of multicollinearity among the independent variables. The multicollinearity test results of this study showed a tolerance value more than 0.10 and a VIF value less than 10. It can be stated that there was no multicollinearity issue between independent variables in this regression model.

Table 5. The results of autocorrelation test

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | 0.495 | 0.245 | 0.191 | 0.10418 | 2.059 |

Autocorrelation test is used to test whether there is a correlation between errors in the linear regression model at time period 't' and errors at the previous time period 't-1'. A good regression model is one in which there are no issues of autocorrelation. This study use Durbin-Watson to test autocorrelation. If Durbin-Watson result value is greater than upper limit (du) and less than 4-du then the data should be free of autocorrelation. Based on the results above, the Durbin-Watson test shows a value of 2.059, where the test value is greater than the upper limit (du) of 1.8014 and less than 2.1986 (4-du). It can be concluded that this study have no issue of autocorrelation.

Table 6. The results of heteroscedasticity test

| | Unstardardized Coefficients | | Standardized Coeff. | t | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | -4.342 | 1.316 | | -3.298 | 0.001 |
| X1_ACHANGE | 2.684 | 1.726 | 0.171 | 1.555 | 0.124 |
| X2_LEV | 0.644 | 1.305 | 0.054 | 0.493 | 0.623 |
| X3_BDOUT | -2.018 | 1.503 | -0.148 | -1.343 | 0.183 |
| X4_AUD CHANGE | 0.066 | 0.432 | 0.016 | 0.152 | 0.880 |
| X5_DCHANGE | -0.177 | 0.445 | -0.042 | -.397 | 0.692 |
| X6_CEOPIC | -0.350 | 0.187 | -0.202 | -1.865 | 0.066 |

The objective of the heteroscedasticity test is to examine whether there is a inequality in the variance of residuals from one observation to another within the regression model. The results of heteroscedasticity showed a significant value greater than 0.05 which indicate that this model of regression have no issue of heteroscedasticity.

Table 7. The results of coefficient of determination test

| Model | R Square | Adjusted R Square |
|---|---|---|
| 1 | 0.245 | 0.191 |

The results showed an R Square value of 0.191, equivalent to 19.1%. This implies that the independent variables considered in this study simultaneously affects 19.1% of the impact on the dependent variables. The remaining 80.9% is attributed to other variables beyond the scope of this study.

Table 8. The results of simultaneous F test

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 0.293 | 6 | 0.049 | 4.497 | 0.001 |
| Residual | 0.901 | 83 | 0.011 | | |
| Total | 1.194 | 89 | | | |

The results of the simultaneous F test show an F value of 4.497 and a significant value of 0.001 which is less than 0.05. This implies that financial stability, external pressure, monitoring effectiveness, changes in auditor, changes in director, and frequent number of CEO's picture in annual report simultaneously have a significant effect on financial statement fraud.

Table 9. The results of partial T-test

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | t | Sig. |
| (Constant) | 0.005 | 0.068 | | 0.069 | 0.945 |
| X1_ACHANGE | -0.417 | 0.090 | -0.465 | -4.647 | 0.000 |
| X2_LEV | -0.021 | 0.068 | -0.031 | -0.311 | 0.757 |
| X3_BDOUT | 0.093 | 0.078 | 0.119 | 1.186 | 0.239 |
| X4_AUDCHANGE | -0.047 | 0.022 | -0.200 | -2.073 | 0.041 |
| X5_DCHANGE | 0.004 | 0.023 | 0.016 | 0.162 | 0.872 |
| X6_CEOPIC | 0.002 | 0.010 | 0.019 | 0.194 | 0.847 |

1) The results of this study showed that financial stability which is proxied by assets change (ACHANGE) have a significant value of 0.000 (less than 0.05) and have a negative effect on dependent variable financial statement fraud which is proxied by discretionary accruals (DACCit). This means the hypothesis which stated financial stability has a significant and negative effect on financial statement fraud can be accepted.

2) The results of this study showed that changes in auditor (AUDCHANGE) have a significant value of 0.041 (less than 0.05). This indicates that changes in auditor have a significant effect on financial statement fraud. But the results showed that changes in auditor have a negative effect on financial statement fraud. Then the hypothesis which stated changes in auditor have a significant and positive effect on financial statement fraud cannot be accepted.
3) Based from the results above, it can be concluded that external pressure, monitoring effectiveness, changes in director, and frequent number of CEO's picture in annual reports have no significant effect on financial statement fraud as the significant value is more than 0.05. then the hypothesis that stated before cannot be accepted.

**The Effect of Financial Stability for Detecting Financial Statement Fraud**

From the result above, the variable of financial stability which is proxied by assets change has a significant and negative effect on detecting financial statement fraud. This indicate that there is instability in the company which will influence the management to commit fraud. These result is supported by previous research done by Nanda, Zenita, and Salmiah (2019) [14] and Maharani (2018) [8] that said that financial stability have a significant and negative effect on financial statement fraud.

**The Effect of External Pressure for Detecting Financial Statement Fraud**

High leverage could indicate that a company have high debt which means the company have high risk of credit. Based from the results above external pressure which is proxied by leverage has no significant effect on detecting financial statement fraud. This means that the company have an ability to repay its debt and does not pressure the management to commit fraud. These results in supported by previous research done by Utami and Pusparini (2019) [7], Navila and Ardianto (2020) [12], Harman and Bernawati (2020) [20], and Mangeka and Rahayu (2020) [21] that showed external pressure does not significantly affects financial statement fraud.

**The Effect of Monitoring Effectiveness for Detecting Financial Statement Fraud**

Monitoring effectiveness which is proxied by the ratio of independent commissioner has no significant effect on detecting financial statement fraud. The independent commissioners in a company were task to supervise the company's performance. The higher proportion of independent commissioner is believed to enhance monitoring effectiveness. However this study does not show significant effect of monitoring effectiveness. It could be noted that this variable may not always be related to the actual enforcement of good corporate governance but could be a mere regulatory fulfillment. Consequently, the role and function of independent commissioners in overseeing company performance may not be fully optimized. These results in supported by previous research done by Maharani (2018) [8], Navila and Ardianto (2020) [12], Harman and Bernawati (2020) [20], and Andrean and Salim (2021) [22] that showed monitoring effectiveness does not significantly affects financial statement fraud.

**The Effect of Changes in Auditor for Detecting Financial Statement Fraud**

Changes in auditor has a significant and negative effect on detecting financial statement fraud. This means that the more frequent change in auditor the probability of financial statement fraud will be lower. These results in supported by previous research done by Utami and Pusparini (2019) [7], and Nanda, Zenita, and Salmiah (2019) [14] that showed changes in auditor has a significant and negative effect on detecting financial statement fraud.

**The Effect of Changes in Director for Detecting Financial Statement Fraud**

Changes in director has no significant effect on detecting financial statement fraud. This situation could arises when the company's primary stakeholders want to enhance the company's effectiveness by appointing directors with greater experience. As a result, underperforming directors can be replaced with highly skilled individuals who will function more effectively, resulting in additional enhancements to the company's productivity. These results in supported by previous research done by Nanda, Zenita, and Salmiah (2019) [14] and Maharani (2018) [8] that showed changes in director does not significantly affects financial statement fraud.

**The Effect of Frequent Number of CEO's Picture in Annual Report for Detecting Financial Statement Fraud**

The frequency number of CEO's picture in annual report has no significant effect on detecting financial statement fraud. This could be arised because the number of CO's photos in annual reports does not mean arrogancy of the CEO, instead it is one of the management's way to introduced the company's stakeholders to public. These results in supported by previous research done by Maharani (2018) [8] and Himawan and Wijanarti (2020) [9] that showed the frequency number of CEO's picture in annual report does not significantly affects financial statement fraud.

## 4. CONCLUSIONS AND SUGGESTIONS

In conclusion, this study was to examined the effects of fraud pentagon theory for detecting financial statement fraud in banking companies listed in the Indonesia Stock Exchange for 2020-2022 period. The fraud pentagon theory consists of five elements which is pressure proxied by financial stability and external pressure, opportunities which is monitoring effectiveness proxied by ratio of independent commissioners, rationalization which is proxied by changes in auditor, competence which is proxied by changes in director, and arrogance which is proxied by frequent number of CEO's picture in annual reports. The results show that financial stability and changes in auditor have a significant and negative effect, meanwhile external pressure, monitoring effectiveness, changes in director, and frequent number of CEO's picture in annual reports have no significant effect on financial statement fraud.

There are limitations contained in this study. The results suggest that financial statement fraud is influenced by a multitude of factors. Consequently, future research could consider incorporating a broader range of variables beside 6 variables of fraud pentagon theory used in this study. Future researchers also could possibly integrating both quantitative and qualitative research methods as the approach is warranted as certain variables in the present study could not be adequately elucidated using a purely quantitative approach.

This outcome of this study aims to be a contribution to various stakeholders, specifically companies and financial report users. The anticipation is that this research will help the management to enhance internal control and supervision within a company, thereby mitigating the risk of financial statement fraud. Moreover, it is anticipated that the research will provide users of financial reports with valuable insights for evaluating companies when making investment decisions.

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