

# EFFECT FRAUD DIAMOND THEORY DETECTING FINANCIAL STATEMENT FRAUD WITH PANDEMIC AS CONTROL VARIABLE

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**Abstract:** The COVID-19 pandemic has caused nationwide economic losses. This condition forces companies to try keeping financial performance stable. What needs to be watched out for during this pandemic is hiding or manipulating company financial statements to improve investors' interest in investing on the company during this pandemic. Before the pandemic, financial statement fraud cases had often occurred in Indonesia, such as cases of auditor failure, companies revising financial statements, or manipulating false claims to get rewards. This study aims to determine the relationship between financial stability, external pressure, financial targets, ineffective monitoring, change of auditors, and change of directors on financial statement fraud. The sample of this research is pharmaceutical companies listed on the Indonesia Stock Exchange for the period of 2018–2021. This study uses secondary data sources originating from the company's financial statements. The results of the study stated that financial stability, financial target, change of auditor, and change of director had no effect on financial statement fraud. External pressure has a positive effect on financial statement fraud, while ineffective monitoring has a negative effect on financial statement fraud.

**Keywords:** financial statement fraud, pandemic, fraud diamond, pharmacy

## INTRODUCTION

Covid-19 pandemic has made restrictions on activities that can cause economic losses nationally (Hadiwardoyo, 2020). The impact of the pandemic has also led to a deflation in demand and supply resulting from widespread business closures as a form of controlling the spread of covid. The thing that

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needs to be monitored during this pandemic is hiding or manipulating company financial statements to maintain investors' interest to invest during this pandemic. As the result, experienced managers tend to be pressured to maintain company's financial stability, because financial stability is a reflection of economic conditions experienced by the company.

This condition helps the company maintain stable financial performance. Recently, a second-hand antigen fraud case was perpetrated by Kimia Farma in North Sumatra with an estimated profit of 1.8 billion Rupiah. The former pharmaceutical chemical manager was established as a suspect in the case. According to the Association of Certified Fraud Examiners (ACFE 2020), Fraud is a misrepresentation of the truth or concealment of material facts to encourage others to act in a detrimental way.

Based on a survey by the Association of Certified Fraud Examiners (ACFE) in 2022, corruption has the highest frequency of cases at 70% compared to asset abuse at 21% and financial statement fraud at 9%. Although fraud in financial statements has the least percentage of cases, the percentage of losses generated is the highest when compared to corruption and asset abuse, which is 67.4%. One of sectors that were detected as committing financial statement fraud was the pharmacy sector. According to data from ACFE 2020, there were 149 cases in the health sector that experienced fraud. The industry suffers an average loss of \$200 million. Several cases of financial statement fraud that have appeared in Indonesia include the following cases; PT Itama Naroraya Tbk., PT Indofarma Tbk., PT Harsen Laboratories Tbk., and PT Asa.

Financial statement fraud is often carried out by the company in the form of earnings management or profit recognition that is not in accordance with the financial statements. Earnings management can make the company's performance look better and if investors are not careful, they will be easily fooled by management. A financial statement fraud begins with the disclosure of errors in the presentation or management of earnings from the financial statements every quarter that is considered immaterial, which then continues to be allowed and grows into a materially misleading fraud.

This study aims to determine the effect of financial stability, financial targets, external pressure, ineffective monitoring, change of auditors, and change

of directors on companies listed in the Indonesia Stock Exchange for the period of 2016-2018. There are 6 hypotheses formulated in this study, as follows:

H1: Financial Stability has a positive effect on the financial statement fraud.

H2: External Pressure has a positive effect on the financial statement fraud.

H3: Financial Target has a positive effect on the financial statement fraud.

H4: Ineffective Monitoring has a negative effect on the financial statement fraud.

H5: Change of Auditor has a positive effect on the financial statement fraud.

H6: Change of Director has a positive effect on the financial statement fraud.

## **METHOD**

This research used a quantitative approach and the data used in this study is secondary data. Secondary data is obtained of annual report and financial statement. This research data are sourced from the 2018-2021 period financial statements of Pharmacy Companies listed on IDX and those that have been published on related Company Websites.

### **Populations and Sample**

The population used in this research are Pharmacy companies listed on IDX in the period of 2018–2021. This research uses 13 population from 23 companies and the amount of data used is 52 data.

### **Operational Definition and Variable Measurement**

#### **Financial Stability**

Financial stability can be calculated as a ACHANGE which is Ratio of change assets for two years (Wicaksana, 2019). Evaluation of company's financial stability can be seen from the condition of the assets. Total assets can describe the wealth of the company and show stable growth. The calculation model used is as follows:

$$\text{ACHANGE} = \frac{(\text{assets total t}) - (\text{assets total t - 1})}{(\text{assets total t - 1})}$$

## External Pressure

Excessive pressure from external parties occur, bringing a risk of fraud in financial reporting. One of the pressures on company management is the need to obtain additional debt or loan sources and the obligation to repay loans (Purnama & Astika, 2021). Leverage is a ratio of debt opposed to company assets (Wicaksana, 2019). High leverage ratio can be described as the company having large amount of debt and has high credit risk, which cause creditors to be worried to provide loans to the company (Jaunanda et al, 2020). The calculation model used is as follows:

$$\text{Leverage} = \frac{\text{liability total}}{\text{assets total}}$$

## Financial Target

Financial target can be calculated using ROA (Return on Assets) because when companies carry out of their activities, they provide a target amount of profit that must be obtained for the effort expended to earn that profit. ROA is part of profitability ratio that can be used to measure the effectiveness of a company to evaluate company performance (Wicaksana, 2019). The greater the value of ROA and increased profit can indicate better performance (Prayoga & Sudarmaji, 2019). The calculation model used is as follows:

$$\text{ROA} = \frac{\text{net profit}}{\text{assets total}}$$

## Ineffective Monitoring

Independent commissioners are the members of board of commissioners who are not affiliated with the shareholders, director, or other commissioners (Jaunanda et al, 2020). If a commissioner has a relationship with one of the components above, control of the company cannot be independent. This is why monitoring company performance is not effective. This proves that proportion of independent commissioners can influence the level of fraud on a company. The calculation model used is as follows:

$$\text{BDOUT} = \frac{\text{number of independent commissioners}}{\text{total number of commissioners}}$$

### **Change of Auditor**

Change of auditors in a company is considered an effort to eliminate traces of fraud that were found by previous auditors (Suryani, 2019). This tendency encourages companies to replace independent auditors to cover fraud that occurred in a company. A company will replace independent auditors when it wants to hide something that is not fair and should not be known by the public. This research measures change of auditor and change of public accounting firm using a dummy variable. If during 2018–2021 there is a change in the public accounting firm, then it will be coded as number 1 and 0 for the opposite.

### **Change of Director**

Change of director generally contains certain political aspect that can cause a conflict of interest (Suryani, 2019). A company makes a change of director to improve performance through change in the organizational structure (Jaunanda et al, 2020). However, change of director may indicate fraud because they think that the company wants to get rid of the old director who knows about the company's fraudulent practices. This research measures change of director based on the change of director occurring in the company using dummy variable. If during 2018–2021 there is a change of director in the company, it will be coded as number 1 and 0 for the opposite.

### **Pandemic**

A pneumonia epidemic had brought change in the economic conditions around the world. The pandemic is a control variable measured using a dummy variable. The period of 2018–2019 is coded as 0 for before the pandemic, while 2020–2021 is coded as 1 for after or during the pandemic.

### **Earnings Management**

Earning management is an accounting practice done to generate financial report that reflect the strength of a healthy organization to influence internal and external parties of the company by manipulating the accrual component in the financial statements through the accounting method used. Earnings management

is the act of manipulating financial statement of a company through a manager's self assessment (Rusmana & Tanjung, 2019). Earnings Management can be measured through discretionary accruals:

$$DACC_{it} = \frac{TACC_{it}}{TA_{it-1}} - NDACC_{it}$$

## RESULTS

### Descriptive Analysis

Table 1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Financial stability	52	-,29	,65	,1348	,18562
External pressure	52	,10	,75	,3580	,19530
Financial target	52	-,06	,92	,0884	,14378
Ineffective monitoring	52	,33	,75	,4827	,10132
Change of auditor	52	,00	1,00	,2500	,43724
Change of director	52	,00	1,00	,5192	,50450
Pandemic	52	,00	1,00	,5192	,50450
Financial statement Fraud	52	-5,03	5,08	,0187	2,09904

In Table 1, there are 52 samples used in this study. It is known that the minimum value of the financial stability variable of -0.29 comes from PT Merck Tbk. The maximum value of 0.65 comes from PT Sarana Meditama Metropolitan Tbk. The average sample used in this study has a percentage rate of change in total assets of 13.48%. The negative minimum value is due to a decrease in the number of assets. External pressure indicator have a minimum value of external pressure of 0.10 that comes from PT Sarana Meditama Metropolitan Tbk. The maximum value of 0.75 comes from PT Indofarma Tbk. The average company sample used in this study has a leverage level of 35.8%. For financial target indicators, the minimum value of the financial target of -0.06 comes from PT Sarana Meditama Metropolitan Tbk. In addition, the maximum value of 0.92 came from PT Merck Tbk. The average company sample used in this study has a percentage rate of return on assets of 8.84%. This negative minimum value is because in 2020 the company suffered a loss.

The ineffective monitoring indicator have a minimum value of 0.33 that comes from PT Darya Varia Laboratoria Tbk. The maximum value of 0.75 comes from PT Sarana Meditama Metropolitan Tbk. The average company sample used in this study has an indicator percentage of 48.27%. Change of auditor has a minimum value of 0 and a maximum of 1. The average is 0.2500 and the standard deviation is 0.43724. With an average value of 0.2500, it means that the average company in this study changes auditors 25 times. Change of director has a minimum value of 0 and a maximum of 1. The average value is 0.5192 and the standard deviation is 0.50450. The average value of 0.5192 means that almost all of the companies in this research made changes to directors. The pandemic has a minimum value of 0 and a maximum of 1. It has an average of 0.5192 and a standard deviation of 0.50450. With an average value of 0.5192, it means that the average number of companies affected by the pandemic is 52 or the entire sample. It is known that the minimum value of financial statement fraud of -5.03 comes from PT Phapros Tbk. because the number of DACC is smaller than the others. The maximum value of 5.08 comes from PT Mitra Keluarga Karyasehat Tbk. This negative minimum value is due to the company's operating cash flow experiencing a deficit, which has an impact on the company's TACC value being smaller.

### Classic Assumption Test

Table 2 Normality Test One-Sample Kolmogorov-Smirnov

Unstandardized Residual		
N		52
Normal parameters	Mean	,0000000
	Std. deviation	1,64972796
Most extreme differences	Absolute	,054
	Positive	,050
	Negative	-,054
Test statistic		,054
Asymp. Sig. (2-tailed)		,200

Table 3 Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
Financial stability	,848	1,179
External pressure	,626	1,598
Financial target	,825	1,212
Ineffective monitoring	,823	1,215
Change of auditor	,710	1,409
Change of director	,854	1,171
Pandemic	,860	1,163

Table 4 Autocorelations Test

Description	Coefficient
Durbin Watson	1,925

Table 5 Heteroscedasticities Test

Model		Sig.
1	(Constant)	,045
	Financial stability	,247
	External pressure	,130
	Financial target	,961
	Ineffective monitoring	,773
	Change of auditor	,380
	Change of director	,616
	Pandemic	,537

## Multiple Linear Regression Method

Table 6 Multiple Linear Regression

Model		Unstandardized Coefficients
1	(Constant)	-1,151
	Financial stability	-,595
	External pressure	-4,804
	Financial target	1,749
	Ineffective monitoring	6,654
	Change of auditor	,319
	Change of director	-,358
	Pandemic	-,561

Based on Table 6, the regression models that can be made are as follows:  
 $DACC = -1,151 - 0,595 \text{ Financial Stability} - 4,804 \text{ External Pressure} + 1,749 \text{ Financial Target} + 6,654 \text{ Ineffective Monitoring} + 0,319 \text{ Change of Auditor} - 0,358 \text{ Change of Director} - 0,561 \text{ Pandemic.}$

### Goodness of Fit Test

Table 7 Result of F Statistics

Model	F	Sig.
1 Regression	3,890	,002

Table 8 Result of Determination Coefficient

R Square	Adjusted R Square
,382	,284

Based on Table 7, the results of the F test show that the significance value of the F test is  $0.002 < 0.05$ . Hence, it can be concluded that the regression model in this study is feasible. The R2 test in Table 8 shows that the adjusted R2 value is 0.284 or 28.4%. Thus, it can be concluded that the ability of the independent variable in this study to explain financial statement fraud was 28.4%, while 71.6% was explained by other factors.

### Hypothesis Test

Table 9 Result of t-Test

Model	Unstandardized Coefficients	Sig.
1 (Constant)	-1,151	,437
Financial stability	-,595	,685
External pressure	-4,804	,005
Financial target	1,749	,363
Ineffective Monitoring	6,654	,018
Change of auditor	,319	,638
Change of auditor	-,358	,505
Pandemic	-,561	,297

Table 9 is the result of the t-test, which states that External pressure has a regression coefficient of -4.804 and a significance value of  $0.005 < 0.05$ . These results indicate that external pressure has a negative effect on financial statement fraud. Ineffective monitoring has a regression coefficient of 6.654 with a significance value of  $0.018 < 0.05$ . These results indicate that ineffective monitoring has a positive effect on financial statement fraud. Meanwhile, financial stability, financial target, change of auditor, change of director, and pandemic control variables do not affect financial statement fraud because they have a significance value of  $> 0.05$ .

## DISCUSSION

### Relationship of Financial Stability on The Financial Statement Fraud

The results of this research indicate that financial stability has no effect on financial statement fraud. These results describe that financial stability measured by asset change ratio is not fully indicative of financial statement fraud (Rusmana & Tanjung, 2019). Other considerations are that asset changes cannot indicate financial statement fraud because the company's financial stability tends to fluctuate, hence it cannot be managed to commit fraud to improve company stability.

### Relationship of External Pressure on the Financial Statement Fraud

The results of this research indicate that external pressure has a negative effect on financial statement fraud. The external pressure measurement indicator uses the LEV ratio. High and low leverage ratios do not become pressure for management to commit financial statement fraud. It is because the company is still able to make debt payments and can use the debt to carry out operational activities to generate profits.

Leverage ratio is not always a consideration for making investments or loans to companies. However, it can be accompanied by other considerations such as good relations with creditors and previous debt repayments. The higher level of debt owned the company, the tighter the observation carried out by creditors to see the company's credit history. Management in this case does not get pressure from third parties to compete on conditions before and after the COVID-19

pandemic, so that the presentation of financial statements is still reasonable (Marviana et al, 2021).

### **Relationship of Financial Target on the Financial Statement Fraud**

The results showed that financial target did not affect financial statement fraud. Financial target has no effect because management does not always perform financial statement fraud to increase the company's profitability. This indicates that no matter how great the ROA of the company and its need to meet financial targets, the management is not pressured to perform financial statement fraud.

Unstable economic conditions as an effect of the covid 19 pandemic can also affect the level of company profitability which can cause the ROA value to be low. Decreased profitability of the company as a result of economic conditions that shake the industry cannot be predicted, resulting in an apparent increase or decrease in profitability.

### **Relationship of Ineffective Monitoring on the Financial Statement Fraud**

The results of this research indicate that ineffective monitoring has a positive effect on financial statement fraud. The indicator for measuring ineffective monitoring in this research uses the ratio of the proportion of independent commissioners. The existence of an independent board of commissioners can ensure more independent control on the interests of certain parties. However, if there is a conflict with the independent board of commissioners, there can be more objective supervision. Hence, it can be concluded that the number of independent commissioners in the company is a factor that can increase the company's operational effectiveness. Mean of this research shows 0.4827 or 48%. It means that this value exceeds the minimum limit of the provisions stipulated in the Financial Services Authority Regulation No.33/POJK.04/2014 regarding the proportion of independent commissioners, which is 30%.

### **Relationship of Change of Auditor on the Financial Statement Fraud**

The results showed that change of auditor did not affect financial statement fraud. It happens because the change of auditors was caused by the company's

dissatisfaction about the previous auditor's performance in auditing the company. Moreover, the company also follows regulations from the government about the limitation of audit services in an entity with a maximum of 5 financial years. This is consistent with Government Regulation number 20 of 2015 concerning the Practice of Public Accountants, Article 11 paragraph 1. In this research, as many as 25 companies made changes of auditors within a period of 4 years. This happens because the company's management is accustomed to external auditors who have a good reputation, so that whether there is change or not, they did not commit fraud.

### **Relationship of Change of Director on the Financial Statement Fraud**

The results showed that change of director did not affect financial statement fraud. Majority of companies in this study made changes of directors, but this was not because there were indications of fraud, only dissatisfaction with performance and there were directors who passed away. Company changes directors not as an effort to eliminate the traces of directors who are considered aware of fraud committed on the company, but because of a member of the board of directors resigned or reached the end of his term of office. That's why the company considered it necessary to recruit new directors.

### **Relationship of Pandemic as Control Variable on the Financial Statement Fraud**

The results showed that pandemic as control variable did not affect financial statement fraud. This happens because earnings management before and during the pandemic does not make managers use the fact to do earnings management, but rather to consider the company's internal conditions as the level of determining earning management that will be used.

## **Conclusion**

Based on the results of research, it can be concluded that external pressure have a negative effect on financial statement fraud and ineffective monitoring have a positive effect on financial statement fraud. Meanwhile, financial stability, financial target, change of auditor, and change of director did not affect financial statement fraud.

## Implication and Limitations

There are loopholes that can be used by companies to carry out financial statement fraud actions. It can be done by carrying out strict control of the performance on pharmaceutical companies. Strict control can be in the form of conducting regular audits every month and sanctions if fraud is identified. The implications of this research can be used as a reference for investors. Strict control as an effort to minimize the risk in financial statement fraud actions through earnings management occurring to attract investors' attention.

The implication for the government is to provide additional information regarding the detection of financial statement fraud by pharmaceutical companies through the fraud diamond theory approach. For the public, this research can provide educational information related to the factors contributing to pharmaceutical companies taking financial statement fraud actions. This study has limitations, such as several companies not including complete financial statements, and as such, they cannot be used as samples in the study.

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