

# Fraud Triangle against Fraudulent Financial Statements

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**Abstract.** It is the focus of this study to investigate the fraud triangle in connection to fake financial statements. The data used in this investigation is quantitative. Secondary sources were used to gather the information. The following conclusions can be taken from the research: There is no correlation between financial stability and financial statement fraud, but financial stability, external pressure, financial target, ineffective monitoring, and the change in auditor all have an adjusted R square value of 43.7 percent and 2.5 percent and the remaining Indonesia 56.3% (100% - 43.7%), Malaysia 97.5% (100% - 2.5%) explained by other variables that are not included in the regression model such as Personal Financial Need, Nature of Industry, Organizational Structure, and Nature of Industry.

**Keywords:** External Pressure; Ineffective Monitoring; Financial Target; Change in Auditor and Financial Statement Fraud; Financial Stability

## 1 Introduction

Many criminals have taken advantage of the global panic over the COVID-19 epidemic, which has had a negative impact on the health of people and the economy of many countries. "Fraud Alert: Be advised that criminals misuse COVID-19 internationally through a variety of frauds," said the strong warning from the US Department of Justice [1].

Financial statements are a form of structured presentation of financial position that provides an entity's financial performance during a certain period [2]. This manipulation activity is a form of fraud or fraud [3]. According to [4] Fraud is an act that can harm a person or many people, groups or companies by taking advantage for himself. Fraud is a deliberate act to deceive, deceive or a dishonest way to eliminate or take a sum of money, property, and rights that do not belong to us either because of an impact or a fatal action from the activity itself [5] If there is a material error in the financial statements, it must be presented honestly so that it can properly describe events and other transactions that actually occur in business activities [6]. There are cases of financial statement fraud that occurred in Indonesia, one of which is very familiar is the fraudulent financial report at PT Tiga Pilar Sejahtera Food Tbk (AISA), where two former directors, namely Stefanus Joko Mogogito and Budhi Istanto were charged by the prosecutor with seven years in prison and a maximum fine of 2 M. The prosecutor said that the alleged manipulation of financial statements by PT Tiga Pilar, namely

by Joko and Evidence was carried out to raise the company's share price at that time. The two directors have violated Article 95 of Law No. 8 of 1995 concerning the Capital Market.

## **2 Literature Review**

### **2.1 Agency Theory**

According to [7], agency theory is a concept that outlines the interaction between the agent (contract recipient) and the principal (contract giver). The principal grants the agent a contract by working to accomplish his objectives, thereby authorizing the agent to make decisions.

### **2.2 Definition Financial Statement**

According to [8] The financial statements of a firm show its financial state and performance at a specific point in time. Meanwhile, according to [9] Financial reports are one of the important sources of information besides information such as economic conditions, industry, management quality and others.

### **2.3 Definition Financial Statement Fraud**

In the opinion of [10], financial statement fraud is the intentional distortion or obfuscation of financial statement information with the objective of fooling financial statement users. Accredited Certification Examiners (ACFE) defines financial statement fraud as deceit by management in the form of materially false and misleading claims in financial reports that harm investors and creditor rights. A financial or non-financial fraud may be perpetrated.

### **2.4 Definition of Fraud**

According to [11], fraud is a premeditated act perpetrated by fraud perpetrators that results in financial statement misstatements. According to [12], fraud is an act of violating the rules in which the perpetrators are either inside or outside the organization, with the purpose of earning personal or group gains that can directly affect other parties [12].

### **2.5 Fraud Tree**

This Fraud Tree created by ACFE maps out fraud in the work environment. Forensic accountants are very helpful in diagnosing and recognizing fraud that occurs by using this map. There are several symptoms of fraud which in auditing are called red flags. By mastering investigative audit techniques and assisted by understanding these symptoms, forensic accountants can more easily detect fraud [13].

## 2.6 Theory Fraud Triangle

SAS No. 99, Consideration of Fraud in Financial Statement Auditing, was originally published in the professional literature by [14]. The fraud triangle or the fraud triangle has been variously referred to as this concept. The title pressure is applied to the triangle's first point. Opportunity on the second corner. Rationalization is the third angle [13] The Fraud Triangle notion connects three variables that must exist for an individual to commit fraud - felt pressure, perceived opportunity to perform the fraud, and the ability to rationalize the fraudulent action in order for it to be accepted [9].

## 2.7 Beneish M-Score

With the guidance of the Beneish model, Greece's financial institutions and government agencies can safeguard their customers and investors from speculative games and guarantee that Greece's economy runs smoothly and efficiently" [5].

Roxas concluded that the SGAI, LVGI, and TATA indices of total accruals to total assets utilized by Beneish had little bearing on the company's financial performance. Thus, a new term, limited to five indicators, and new thresholds are created for the m-score indicator:

$$M \square score = -6.065 + 0.823 \times DSRI + 0.906 \times GMI + 0.593 \times AQI + 0.717 \times SGI + 0.107 \times DEPI \quad (3)$$

$$\text{Days Sales in Receivable Index (DSRI)} = \frac{(\text{Account Receivable}_t / \text{Sales}_t)}{(\text{Account Receivable}_{t-1} / \text{Sales}_{t-1})}$$

$$\text{Sales Growth Index (SGI)} = \frac{\text{Sales}_t}{\text{Sales}_{t-1}}$$

$$\text{Gross Margin Index (GMI)} = \frac{[(\text{Sales}_{t-1} - \text{COGS}_{t-1}) / \text{Sales}_{t-1}]}{[(\text{Sales}_t - \text{COGS}_t) / \text{Sales}_t]}$$

$$\text{Depreciation Index (DEPI)} = \frac{[\text{Depreciation}_{t-1} / (\text{PPE}_{t-1} + \text{Depreciation}_{t-1})]}{[\text{Depreciation}_t / (\text{PPE}_t + \text{Depreciation}_t)]}$$

$$\text{Asset Quality Index (AQI)} = \frac{[(1 - (\text{Current Asset}_t + \text{PPE}_t) / \text{Total Assets}_t)]}{[(1 - (\text{Current Asset}_{t-1} + \text{PPE}_{t-1}) / \text{Total Assets}_{t-1})]}$$

$$\text{Sales General and Administrative Expenses Index (SGAI)} = \frac{\text{SG\&A Expenses}_t / \text{Sales}_t}{\text{SG\&A Expenses}_{t-1} / \text{Sales}_{t-1}}$$

$$\text{Leverage Index (LVGI)} = \frac{[(\text{Current Liabilities}_t + \text{Long Term Debt}_t) / \text{Total Assets}_t]}{[(\text{Current Liabilities}_{t-1} + \text{Long Term Debt}_{t-1}) / \text{Total Assets}_{t-1}]}$$

$$\text{LEVERAGE} = \frac{\text{Total Hutang}}{\text{Total Aset}}$$

$$\text{ROA} = \frac{\text{Laba Bersih Setelah Pajak}_t}{\text{Total Aset}_t}$$

$$\text{Total Accruals to Total Assets (TATA)} = \frac{(\text{Net Income From Continuing Operations}_t + \text{Cash Flow Operations}_t)}{\text{Total Assets}_t}$$

$$\text{BDOU} = \frac{\text{Total Dewan Komisaris Independen}}{\text{Total Dewan Komisaris}}$$

$$\text{ACHANGE} = \frac{\text{Total Aset}_t - \text{Total Aset}_{t-1}}{\text{Total Aset}_{t-1}}$$

## 3 Result and Discussion

### 3.1 Descriptive Statistical Analysis

| Descriptive Statistics |    |         |         |         |                |
|------------------------|----|---------|---------|---------|----------------|
|                        | N  | Minimum | Maximum | Mean    | Std. Deviation |
| Kecurangan LK          | 60 | -3,83   | 3,71    | -1,8412 | 1,45300        |
| Financial Stab         | 60 | ,07     | ,10     | ,0164   | ,03345         |
| Eksternal Press        | 60 | ,14     | ,63     | ,4000   | ,13561         |
| Financial Target       | 60 | ,06     | ,10     | ,0110   | ,02453         |
| Ineffective            | 60 | ,50     | 1,00    | ,7000   | ,24702         |
| Monitor                | 60 | ,00     | 1,00    | ,2667   | ,44595         |
| Change Auditor         | 60 |         |         |         |                |
| Valid N (listwise)     | 60 |         |         |         |                |

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| Descriptive Statistics |    |         |         |         |                |
|------------------------|----|---------|---------|---------|----------------|
|                        | N  | Minimum | Maximum | Mean    | Std. Deviation |
| Kecurangan LK          | 60 | -3,46   | -1,73   | -2,6741 | ,41072         |
| Financial Stab         | 60 | ,08     | ,10     | ,0653   | ,03737         |
| Eksternal Press        | 60 | ,05     | ,63     | ,4022   | ,19490         |
| Financial Target       | 60 | ,03     | ,03     | ,0081   | ,01373         |
| Ineffective            | 60 | ,50     | ,50     | ,5000   | ,00000         |
| Monitor                | 60 |         |         |         |                |
| Change Auditor         | 60 | ,00     | ,00     | ,0000   | ,00000         |
| Valid N (listwise)     | 60 |         |         |         |                |

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### 3.2 Multiple Linear Regression Analysis

| Model               | Coefficients <sup>a</sup>   |            |                           |        |      |                         |
|---------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|
|                     | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. | Collinearity Statistics |
|                     | B                           | Std. Error | Beta                      |        |      | Tolerance VIF           |
| (Constant)          | -2,595                      | 1,504      |                           | -1,726 | ,090 |                         |
| Financial Stab      | ,678                        | 3,097      | ,018                      | ,115   | ,909 | ,869 1,151              |
| Eksternal Press     | -,953                       | 2,313      | -,089                     | -,412  | ,682 | ,344 2,911              |
| Financial Target    | -15,747                     | 8,085      | -,266                     | -1,948 | ,050 | ,860 1,163              |
| Ineffective Monitor | 2,290                       | 1,184      | ,389                      | 1,933  | ,050 | ,395 2,532              |
| Change Auditor      | -1,145                      | ,721       | -,351                     | -1,587 | ,118 | ,327 3,060              |

a. Dependent Variable: Kecurangan LK

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| Model               | Coefficients <sup>a</sup>   |            |                           |        |      |  |
|---------------------|-----------------------------|------------|---------------------------|--------|------|--|
|                     | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |  |
|                     | B                           | Std. Error | Beta                      |        |      |  |
| (Constant)          | -2,000                      | ,214       |                           | -9,339 | ,000 |  |
| Financial Stab      | -,264                       | 1,431      | -,024                     | -,184  | ,855 |  |
| Eksternal Press     | -,881                       | ,309       | -,418                     | -2,849 | ,006 |  |
| Financial Target    | 7,676                       | 4,534      | ,257                      | 1,693  | ,096 |  |
| Ineffective Monitor | -,582                       | ,257       | -,350                     | -2,265 | ,028 |  |
| Change Auditor      | ,161                        | ,171       | ,148                      | ,943   | ,350 |  |

a. Dependent Variable: Kecurangan LK

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### 3.3 Classic Assumption Test

| One-Sample Kolmogorov-Smirnov Test |                |                         |
|------------------------------------|----------------|-------------------------|
|                                    |                | Unstandardized Residual |
| N                                  |                | 60                      |
| Normal                             | Mean           | 0E-7                    |
| Parameters <sup>a,b</sup>          | Std. Deviation | ,65023135               |
| Most Extreme                       | Absolute       | ,154                    |
| Differences                        | Positive       | ,154                    |
|                                    | Negative       | -,098                   |
| Kolmogorov-Smirnov Z               |                | 1,191                   |
| Asymp. Sig. (2-tailed)             |                | ,117                    |

a. Test distribution is Normal.  
b. Calculated from data.

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| Model               | Collinearity Statistics |       |
|---------------------|-------------------------|-------|
|                     | Tolerance               | VIF   |
| (Constant)          |                         |       |
| Financial Stab      | ,892                    | 1,121 |
| Eksternal Press     | ,701                    | 1,426 |
| Financial Target    | ,658                    | 1,519 |
| Ineffective Monitor | ,633                    | 1,579 |
| Change Auditor      | ,617                    | 1,620 |

a. Dependent Variable: Kecurangan LK

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### 3.4 Multicollinearity Test

| Model               | Collinearity Statistics |       |
|---------------------|-------------------------|-------|
|                     | Tolerance               | VIF   |
| (Constant)          |                         |       |
| Financial Stab      | ,869                    | 1,151 |
| Eksternal Press     | ,344                    | 2,911 |
| Financial Target    | ,860                    | 1,163 |
| Ineffective Monitor | ,395                    | 2,532 |
| Change Auditor      | ,327                    | 3,060 |

a. Dependent Variable: Kecurangan LK

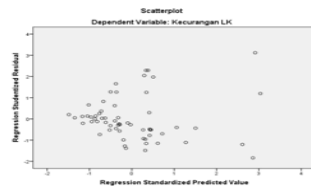
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| One-Sample Kolmogorov-Smirnov Test |                |                         |
|------------------------------------|----------------|-------------------------|
|                                    |                | Unstandardized Residual |
| N                                  |                | 60                      |
| Normal                             | Mean           | 0E-7                    |
| Parameters <sup>a,b</sup>          | Std. Deviation | ,65023135               |
| Most Extreme                       | Absolute       | ,154                    |
| Differences                        | Positive       | ,154                    |
|                                    | Negative       | -,098                   |
| Kolmogorov-Smirnov Z               |                | 1,191                   |
| Asymp. Sig. (2-tailed)             |                | ,117                    |

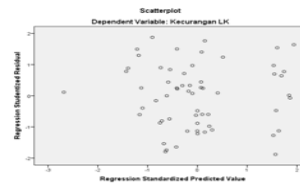
a. Test distribution is Normal.  
b. Calculated from data.

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### 3.5 Heteroscedasticity Test



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### 3.6 Autocorrelation Test

| Runs Test               |                         |
|-------------------------|-------------------------|
|                         | Unstandardized Residual |
| Test Value <sup>a</sup> | -,13364                 |
| Cases < Test Value      | 30                      |
| Cases ≥ Test Value      | 30                      |
| Total Cases             | 60                      |
| Number of Runs          | 38                      |
| Z                       | 1,823                   |
| Asymp. Sig. (2-tailed)  | ,068                    |

a. Median

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| Runs Test               |                         |
|-------------------------|-------------------------|
|                         | Unstandardized Residual |
| Test Value <sup>a</sup> | -,02967                 |
| Cases < Test Value      | 30                      |
| Cases ≥ Test Value      | 30                      |
| Total Cases             | 60                      |
| Number of Runs          | 26                      |
| Z                       | -1,302                  |
| Asymp. Sig. (2-tailed)  | ,193                    |

a. Median

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### 3.7 T-test

| Model               | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|---------------------|-----------------------------|------------|---------------------------|--------|------|
|                     | B                           | Std. Error |                           |        |      |
| (Constant)          | -2,595                      | 1,504      |                           | -1,726 | ,090 |
| Financial Stab      | ,678                        | 5,897      | ,016                      | ,115   | ,909 |
| Eksternal Press     | -,953                       | 2,313      | -,089                     | -,412  | ,682 |
| Financial Target    | -15,747                     | 8,085      | -,266                     | -1,948 | ,050 |
| Ineffective Monitor | 2,290                       | 1,184      | ,389                      | 1,933  | ,058 |
| Change Auditor      | -1,145                      | ,721       | -,351                     | -1,587 | ,118 |

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| Model               | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|---------------------|-----------------------------|------------|---------------------------|--------|------|
|                     | B                           | Std. Error |                           |        |      |
| (Constant)          | -2,000                      | ,214       |                           | -9,339 | ,000 |
| Financial Stab      | -,264                       | 1,431      | -,024                     | -,184  | ,855 |
| Eksternal Press     | -,881                       | ,309       | -,418                     | -2,849 | ,006 |
| Financial Target    | 7,676                       | 4,534      | ,257                      | 1,693  | ,096 |
| Ineffective Monitor | -,582                       | ,257       | -,350                     | -2,265 | ,028 |
| Change Auditor      | ,161                        | ,171       | ,148                      | ,943   | ,350 |

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### 3.8 F-test

| ANOVA <sup>a</sup> |                |    |             |       |                   |
|--------------------|----------------|----|-------------|-------|-------------------|
| Model              | Sum of Squares | df | Mean Square | F     | Sig.              |
| 1 Regression       | 862,127        | 5  | 172,425     | 4,990 | ,001 <sup>b</sup> |
| Residual           | 1865,792       | 54 | 34,552      |       |                   |
| Total              | 2727,919       | 59 |             |       |                   |

a. Dependent Variable: abs\_y

b. Predictors: (Constant), Change Auditor, Financial Target, Financial Stab, Ineffective Monitor, Eksternal Press

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| ANOVA <sup>a</sup> |                |    |             |       |                   |
|--------------------|----------------|----|-------------|-------|-------------------|
| Model              | Sum of Squares | Df | Mean Square | F     | Sig.              |
| 1 Regression       | 1,829          | 5  | ,366        | 2,431 | ,040 <sup>b</sup> |
| Residual           | 8,124          | 54 | ,150        |       |                   |
| Total              | 9,953          | 59 |             |       |                   |

a. Dependent Variable: Kecurangan LK

b. Predictors: (Constant), Change Auditor, Financial Stab, Eksternal Press, Financial Target, Ineffective Monitor

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### 3.9 Coefficient of Determination Analysis (R<sup>2</sup>)

| Model Summary <sup>b</sup> |                   |          |                   |                            |
|----------------------------|-------------------|----------|-------------------|----------------------------|
| Model                      | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1                          | ,696 <sup>a</sup> | ,485     | ,437              | ,67967                     |

a. Predictors: (Constant), Change Auditor, Financial Stab, Financial Target, Ineffective Monitor, Eksternal Press

b. Dependent Variable: abs\_y1

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| Model Summary <sup>b</sup> |                   |          |                   |                            |
|----------------------------|-------------------|----------|-------------------|----------------------------|
| Model                      | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1                          | ,274 <sup>a</sup> | ,075     | ,025              | ,20385                     |

a. Predictors: (Constant), Financial Target, Financial Stab, Eksternal Press

b. Dependent Variable: ABS\_Y

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## 4 Conclusion

The results of the Indonesian Statistical Test, the Effect of Financial Stability (X1) has no effect on Financial Statement Fraud, External Pressure (X2) have no effect on Financial Statement Fraud, Financial targets (X3) have an effect on Financial Statement Fraud, Ineffective Monitoring (X4) have no effect on Report Fraud Finance and Change in Auditor (X5) have no effect on Financial Statement Fraud. Malaysia Statistical Test Results, Financial Stability Effect (X1) have no effect on Financial Statement Fraud, External Pressure (X2) have no effect on Financial Statement Fraud, Financial targets (X3) have an effect on Financial Statement Fraud, Ineffective Monitoring (X4) have an effect on Report Fraud Finance and Change in Auditor (X5) have no effect on Financial Statement Fraud.

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