THE EFFECT OF FINANCIAL STABILITY, EXTERNAL PRESSURE, AND INEFFECTIVE MONITORING OF FRAUDULENT FINANCIAL STATEMENT

1st Sinarti
Managerial accounting department
Politeknik Negeri Batam
Batam, Indonesia
sinar@polibatam.ac.id

2nd R. Irma Nuraini
Managerial accounting department
Politeknik Negeri Batam
Batam, Indonesia
rajairmanuraini12@gmail.com

Abstract – Financial report fraud is an unavoidable matter and can be found on various factors that can cause losses to interested parties. This study aims to examine the effect of financial stability, external pressure, and ineffective monitoring on fraudulent financial statements. The data in this study are secondary data with a sample of research, namely manufacturing companies listed on the Indonesia Stock Exchange from 2014 to 2017 which are determined using purposive sampling technique. The total sample of the study was 256 companies, namely 143 companies indicated by fraud and 113 companies indicated as non-fraud. The test results show that there is an influence between financial stability and external pressure on fraudulent financial statements, while ineffective monitoring does not affect fraudulent financial statements. This study has limitations in processing data, at least years of observation, and at least research variables, so further research is expected to develop based on the limitations of this study.

Keywords: Financial report fraud, triangle fraud, financial stability, external pressure, ineffective monitoring, Beneish m-score.

I. INTRODUCTION

Fraudulent financial statement is an unavoidable part and is still widespread. Based on data from the Fraud Examination Association (ACFE), the existence of fraud in financial statements resulted in losses of 6.3 billion throughout the world in 2016. In Indonesia cases related to fraud still occur. In 2015, Indonesia ranked 88th out of 168 countries in the Corruption Perception Index (CPI). Cases of fraud that occur can be caused by various factors such as the unstable financial condition of the company and the pressure from external parties to pay off company debt and there are still ineffective monitoring of the company and provide opportunities for fraud.

Cressey's theory (1953) which explains the fraud triangle is still used as an approach to detect manipulation, but there are still different results. Research conducted by [12] regarding the detection of fraudulent financial statements with triangle fraud analysis. [5] found that the detection of fraudulent financial statements using the beneish m-score formula has reliability in detecting fraudulent financial statements. Research now only uses pressure and opportunity factors.

This study aims to provide empirical evidence about the effects of financial stability, external pressure, and ineffective monitoring of fraudulent financial statements. This research carried out testing in 2014 until 2017. The benefits obtained from this research are theoretically able to provide information regarding factors that cause fraudulent financial statements, such as financial stability, external pressure, and ineffective monitoring. Practically this research is expected to be able to help stakeholders such as investor, auditors, company or management, and further research.

II. BASIC THEORY AND DEVELOPMENT OF HYPOTHESIS

Theory of fraud triangle

According to Cressey (1953), fraud can occur when a person experiences financial difficulties and cannot disclose his condition [8]. The three conditions that can cause fraud in Cressey's theory (1953) can be seen in the picture below:

![Pressure Triangle](chart.png)
Financial stability

Financial stability is fraud caused by pressure factors that are threatened by several conditions such as the economy, the situation of the entity, and the industry obtained by the manager [11]. Companies that experience a decline in assets are considered vulnerable to fraud [9]. This shows that pressure on financial stability can be used to see the effect on fraudulent financial statements [2].

External pressure

External pressure experienced by company management can be related to management needs in obtaining debt to fulfill its long-term obligations [11]. One source of external pressure is the company's ability to pay off its obligations, in addition managers also get pressure from the need to obtain debt [4]. This can be one of the factors that influence fraudulent financial statements.

Ineffective monitoring

Ineffective monitoring is fraud caused by opportunities. SAS No. 99 states that these opportunities can come from ineffective management monitoring of supervision by parties responsible for the governance of the financial reporting process carried out by the board of commissioners and the audit committee, so that it provides an opportunity for someone to carry out manipulation actions in his company [9].

Fraud

The organization rejects the biggest fraud in the world known as the Association of Certified Fraud Examiners (ACFE) which provides education and training related to the attitude of rejecting [13]. The act of fraud or irregularity committed by a person or entity that causes the emergence of unwholesome benefits is known as fraud [3].

Development of Hypotheses

A. Financial Stability and Fraudulent Financial Statement

Circumstances that illustrate that a company's financial condition in a stable condition is called financial stability. Managers will face pressure to commit fraud if their financial stability is threatened by economic conditions, entity situations, and industry [11]. Based on the description, the hypothesis to be tested by researchers is:

\[ H_1: \text{Financial stability has an effect on fraudulent financial statements} \]

B. External pressure and fraudulent financial statement

According to [11], one of the pressures experienced by management is the need to obtain additional costs or debt. Excessive pressure from third parties or external parties can lead to the risk of fraud that will be carried out on financial statements. Based on the description, the hypothesis to be tested by researchers is:

\[ H_2: \text{External pressure has an effect on fraudulent financial statement} \]

C. Ineffective monitoring and fraudulent financial statement

Ineffective monitoring is a picture of the condition of a company whose control unit is not effective in carrying out monitoring. Weak monitoring can lead to fraud and provide opportunities for managers to implement destructive actions. The use of these factors in detecting financial report manipulation can be applied to see the effect of ineffective monitoring factors on indications of manipulation, so that the third hypothesis to be tested is:

\[ H_3: \text{Ineffective monitoring has an effect on fraudulent financial statement} \]

III. RESEARCH METHODS

A. Population and sample

The data used in this study is secondary data that can be accessed through the official website of the Indonesia Stock Exchange. The population in this test is a manufacturing company listed on the Indonesia Stock Exchange. The sampling technique used is purposive sampling technique with predetermined criteria, namely 1) manufacturing companies listed on the Indonesia Stock Exchange during the period 2014 to 2017; 2) The manufacturing company publishes financial statements during the observation period in completely; 3) Data related to research variables must be available in full on the financial statements of manufacturing companies; 4) The company does not issue financial statements with foreign currency values; 5) Company data is not included in the data outlier; 6) The company is categorized as a company indicated to commit fraud. Non-fraud companies will be used as comparative data.

B. Operational Variables and Measurement Definition

Fraudulent Financial Statement

Fraudulent financial statement is a dummy variable that is for companies that commit fraud given a score of 1 and non-fraud companies are given a score of 0. Detection of the existence of financial report fraud can be known through the Beneish formula m-score consisting of eight financial ratios[1].

The financial ratios that have been calculated will be formulated into the M-Score formula. Provisions regarding signals of fraud can be seen by using an m-score value of less than -2.22, while for non-fraud companies can be seen with the m-score value of more than -2.22. The formulas used are:

\[ M\text{-score} = \frac{-4.84 + 0.92\text{DSRI} + 0.528\text{GMI} + 0.404\text{AQI} + 0.892\text{SGI} + 0.115\text{DEPI} - 0.172\text{SGAI} + 4.679\text{TAT} - 0.327\text{LVGI}}{32} \]

Financial stability

Circumstances that describe a company's financial condition in a stable state are referred to as financial stability [11]). SAS No. 99 states that when there is a threat that affects financial stability due to economic conditions, industry conditions, and global issues, it can put pressure on the company to manipulate. The average change in total assets...
(achange) is used to measure the financial stability variable adapted from the study of [11].

\[ \text{Achange} = \frac{\text{total assets}_t - \text{total assets}_{t-1}}{\text{total assets}_t} \]  

(2)

**External pressure**

According to [11], the need to obtain additional costs or debt is one example of the pressure obtained by management. Excessive pressure from third parties or external parties can lead to the risk of fraud that will be carried out on financial statements.

External pressure variables are measured using leverage adapted from [14] The formulas used are:

\[ \text{Debt to asset ratio} = \frac{\text{Total Debts}}{\text{Total Assets}} \]  

(3)

**Ineffective monitoring**

Ineffective monitoring is a condition where there is no effective control unit in a company in carrying out monitoring of company performance results. Ineffective monitoring variables are proxied by the percentage of audit committee members who are independent of the company (IND) adapted from the [11]. The formulas used are:

\[ \text{IND} = \frac{\text{Total of independent audit committee}}{\text{Total of audit committee members}} \]  

(4)

**Data Processing and Analysis Techniques**

Data was processed using statistical tools, namely SPSS 20. Data analysis was performed by descriptive statistical analysis and logistic regression. The logistic regression equation model in this study is:

\[ \ln \left( \frac{p}{1-p} \right) = b_0 + b_1 \cdot \text{Achange} + b_2 \cdot \text{Lev} + b_3 \cdot \text{IND} + e \]  

(5)

**IV. RESULT AND DISCUSSION**

**A. Characteristics of sample**

Based on the stages of sampling in table 1, the number of manufacturing sector companies as the research population listed on the Indonesia Stock Exchange obtained during the 2014 observation year until 2017 is as many as 582 companies. The final number of samples used to detect fraud is as many as 269 companies with a total of 148 fraudulent companies and 121 non-fraud companies.

**B. Descriptive Statistics**

<table>
<thead>
<tr>
<th>TABLE II. STATISTIC DESCRIPTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>Financial Stability</td>
</tr>
<tr>
<td>External Pressure</td>
</tr>
<tr>
<td>Ineffective Monitoring</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

Source: Processing data with SPSS 20

Table II shows the mean, minimum value, maximum value, and standard deviation of 256 observational data for each variable that is financial stability, external pressure, and ineffective monitoring.

**C. Logistic Regression**

Logistic regression is done to see the relationship between companies that commit fraudulent financial statements.

**Feasibility Test Regression Model**

This test is the initial stage in research using logistic regression. This test uses Hosmer and Lemeshow's goodness of fit test which is measured using the chi-square value. In table III and table IV below will show how much the independent variable affects the dependent variable.

<table>
<thead>
<tr>
<th>TABLE III. CLASSIFICATION TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted</td>
</tr>
<tr>
<td>Observed</td>
</tr>
<tr>
<td>SF</td>
</tr>
<tr>
<td>% Correct</td>
</tr>
<tr>
<td>NF</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>Step 1</td>
</tr>
<tr>
<td>STATUS FRAUD</td>
</tr>
<tr>
<td>NON FRAUD</td>
</tr>
<tr>
<td>FRAUD</td>
</tr>
<tr>
<td>Overall Percentage</td>
</tr>
</tbody>
</table>

Source: Processing data with SPSS 20

The results of the percentage of variables predicted as a whole are 69.1%. These results indicate that the predicted value analyzed can predict the research variables with a level of truth of 69.1%.

<table>
<thead>
<tr>
<th>TABLE IV HOSMER AND LEMESHOW TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

Source: Processing data with SPSS 20

Based on table IV shows the value of p-value or significant value of 0.788 means that the value is greater than 0.05. These
results indicate that the regression model to be tested in this study can be used or feasible to draw conclusions.

**Overall Test**

The overall test is an overall test that aims to assess the hypothesized model that has been fit or not. The test is done by comparing the value between -2 Likelihood Log at the beginning with the Likelihood Log -2 value at the end. In table 5 shows the value of the Likelihood Log 2 -2 at the beginning and in table 6 shows the value of the Likelihood Log -2 at the beginning.

### TABLE V. ITERATION HISTORY BLOCK 0

<table>
<thead>
<tr>
<th>Iteration</th>
<th>-2 Log Likelihood</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 0</td>
<td>350.881</td>
<td>.251</td>
</tr>
</tbody>
</table>

Source: Processing data with SPSS 20

Based on table V above, which shows the iteration history block 0 table or when the independent variables are not included in the model, the value of -2 log likelihood is 350.881, while the table chi-square value has been calculated at 293,247. These results indicate that the value of -2 log likelihood count is equal to 350,881 greater than the table chi-square value that is equal to 293,247 meaning the model to be tested before entering the independent variable is not fit with the data or is not feasible to draw conclusions in this study.

### TABLE VI. ITERATION HISTORY BLOCK 1

<table>
<thead>
<tr>
<th>Iteration</th>
<th>-2 Log likelihood</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>283.963</td>
<td>6.062</td>
</tr>
</tbody>
</table>

Source: Processing data with SPSS 20

Based on table VI above, which shows the iteration history block 1 table, or when the independent variable is included, the value of -2 log likelihood is 283,963, while the calculated chi-square value is 290,028. These results indicate that the value of -2 log likelihood count is equal 283,963 smaller than the chi-square value of the table that is equal to 290,028 which means that the independent variables added to the model can improve the research model to be tested to be fit or feasible to draw conclusions in this study.

### Partial Testing Of Hypotheses

Hypothesis testing uses logistic regression analysis which is processed using SPSS 20.0. These results can be seen in table 7 below.

### TABLE VII. PARTIAL RESULT OF HYPOTHESIS TESTING

<table>
<thead>
<tr>
<th>Step 1</th>
<th>B</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>3.825</td>
<td>.001</td>
</tr>
<tr>
<td>X2</td>
<td>-5.082</td>
<td>.000</td>
</tr>
<tr>
<td>X3</td>
<td>-5.014</td>
<td>.058</td>
</tr>
<tr>
<td>Constant</td>
<td>6.062</td>
<td>.001</td>
</tr>
</tbody>
</table>

Source: Processing data with SPSS 20

Based on the results of testing the hypothesis in table VII above, the regression models in this study are:

\[
\ln \left( \frac{p}{1-p} \right) = 6.062 + 3.825A_{\text{change}} - 5.082L_e + 5.014I + e
\]  

*(6)*

**Financial stability has an effect on fraudulent financial statement**

Based on the results of the analysis in table 8 shows that there is a significant influence between financial stability on fraudulent financial statements. These results indicate that the first hypothesis (H1) is supported. Financial statements are used to attract investors, so companies that are unable to manage changes in the value of their assets and cannot overcome their financial problems are likely to commit fraudulent financial statements. The results of this study support the research conducted by [12]. The results of this study do not support [7] study which states that financial stability has no effect on fraudulent financial statements.

**External pressure has an effect on fraudulent financial statement**

Based on the results of the analysis and testing conducted by the author in table 8 shows a significant influence between external pressures that are proxies by the company's ability to fulfill its long-term obligations (leverage) against fraudulent financial statements. These results indicate that the second hypothesis (H2) is supported. This study shows that the average level of a company's ability to fulfill long-term obligations such as interest payments on debt is highly valued, so the level of fraudulent financial statements is considered low. The results of this study are in line with the research conducted by [10]. The results of this study do not support the research conducted by [6].

**Ineffective monitoring has an effect on fraudulent financial statement**

Based on the results of the analysis and testing conducted by the author in table 8 shows no significant effect between ineffective monitoring as measured by the percentage of the number of independent audit committees on fraudulent financial statements. These results indicate that the third hypothesis (H3) is not supported. This study shows that the higher the level of the average percentage of the number of independent audit committees, the lower the level of fraud that occurs. This can be caused by the high number of independent audit committees [9]. The results of this study support the research conducted by [7].

### TABLE VIII. SUMMARY RESULTS OF HYPOTHESIS TESTING

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Prob.</th>
<th>Kesimpulan</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Financial stability has an effect on fraudulent financial statement</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: External pressure has an effect on fraudulent financial statement</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: Ineffective monitoring has an effect on fraudulent financial statement</td>
<td>0.058</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

Source: processed by the author
V. CONCLUSION

Based on the results of data analysis, hypothesis testing, and findings regarding several conclusions were obtained, namely Financial stability has an effect on fraudulent financial statement, External pressure influences fraudulent financial statements and Ineffective monitoring not has an effect on fraudulent financial statements. This study has limited time and data collection. The limitations of this study are Researchers have difficulty in processing related data looking for benish value m-score, This study just uses four years of observation, This study only uses two components of fraud triangle, This study only uses the manufacturing company sector as the object of research. Suggestions for further research to develop the limitations of this study are Future studies are expected to focus more on data processing, Determination of companies that are indicated to commit fraud is better determined by more authorized institutions, Using a longer period of observation to increase the level of quality of research better, Using a proxy triangle fraud that is different from this study, Future research is expected to be able to use other sectors.

REFERENCES


