FINANCIAL STATEMENT FRAUD DETECTION IN HEXAGON FRAUD PERSPEKTIVE: A STUDY ON SUBSECTOR MANUFACTURING COMPANIES CONSUMER GOODS INDUSTRY

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ABSTRACT

Many companies in Indonesia are still involved in cases of financial statement reports. The research was conducted with the aim of analyzing the elements in the hexagon fraud to detect errors that occur in the financial statements. This study uses a population of companies in the consumer goods manufacturing sub-sector listed on the Indonesia Stock Exchange (IDX) for the 2017-2020 period as many as 16 companies selected as samples using the purposive sampling method. The researcher uses the E-Views software (econometric view) version 9. According to Vusinas (2019), there are six factors that trigger the occurrence of conditions carried out by groups and individuals, namely pressure (pressure), opportunity (opportunity), rationality (rationalization), ability (ability), ego (arrogance) and collusion (collusion). However, the research results show that positively there is only one variable, namely finance which has an influence on financial statements. Then negatively there is one variable, namely the opportunity that has an influence on the financial statements. Meanwhile, there are six variables that have no influence on the vulnerability of financial statements, namely external pressure, financial targets, rationality, ability, arrogance and collusion.

Keywords: fraud hexagon, pressure, opportunity, rationality, ability, ego, collusion and financial statement fraud.

INTRODUCTION

Financial statements are an important part of a company that contains information about the financial status of a company. Financial reports are submitted to clients so that the financial status and results of the performance of the company's operational activities for a certain period are conveyed. Thus, financial statements should be prepared in accordance with the applicable preparation principles in order to obtain good financial and non-financial information.

Financial statements are a form of financial accountability and company operational activities from management to external parties such as investors and creditors. This report will then be used to make decisions, for example to increase the amount of investment or provide credit to the company. Meanwhile, for internal parties, such as the management who manages the company both long term and short term, financial reports are used as a reference to improve performance in order to generate profits so as to increase company value (Diany, 2014).

According to the Association of Certified Fraud Examiners (ACFE), fraud is an act that violates the law by committing fraud intentionally such as falsifying financial statements provided to users, the aim is to gain profits but harm users. Based on research by the Association of Certified Fraud Examiners (ACFE) Global released a Report to the Nations (RTTN), which is the largest anti-fraud organization in August 2020, Indonesia is a country that has recorded 36 cases out of 198 cases in the Asia Pacific region. With this issue, Indonesia received special attention because of the many cases of fraud that occurred.
First, as an example of financial statement fraud that occurred in 2004, the directors of PT Indofarma received a fine of Rp 500 million from Bapepam or the Financial Services Authority (OJK). The results of research from Bapepam found evidence of alleged presentation of financial statements from PT. Indofarma that violated the laws and regulations in the capital market sector. In the financial report of PT. Indofarma it was found that the value of Work in Process, which should have been overstated, was valued higher by Rp. 28.87 billion in the value of goods inventory for the 2001 fiscal year. This resulted in overstated net income and understated Cost of Goods Sold (HPP) with the same value. Therefore, Bapepam asked the directors of PT. Indofarma to first improve the company's accounting control system that is adequate so that similar problems do not occur in the future. Second, the directors of PT. Indofarma are asked to periodically at the end of each month submit and submit financial reports to Bapepam. Third, after improving the company's accounting control system, PT. Indofarma was asked to carry out a special audit of the controls carried out by showing a public accountant who had been registered with Bapepam. Second, the example of the financial statement fraud scandal in 2019 yesterday hit PT Tiga Pilar Sejahtera Food Tbk (AISA). In this case, there is an assumption of violation by the old management of AISA issued by Ernst & Young’s public accounting firm. In the accounts receivable accounts, inventories, and fixed assets there is an overstatement of Rp 4 trillion and in the sales account Rp 662 billion and the EBITDA of the Food Entity Rp 329 billion. Then there is the assumption of a flow of funds of Rp. 1.78 trillion using AISA’s loan disbursement from several banks, deposit disbursement, transfer of funds, and financing of the costs of Affiliated Parties to parties suspected of being affiliated with the old management of AISA. Then there was no adequate disclosure to stakeholders that was relevant enough related to the relationship and transactions that occurred with the Affiliated Party. This violates the Decree of the Chairman of the Capital Market and Financial Institution Supervisory Agency No.KEP-412/BL/2009 concerning Affiliated Transactions and Conflicts of Interest in Certain Transactions

The topic of fraud, such as the fraud triangle, fraud diamond, and fraud pentagon, has been discussed by several previous researchers. Research on the factors that cause financial statement fraud conducted by previous researchers reveals several different views.

Such as research on manufacturing companies conducted by Wahyuni & Budiwitjaksono (2017) using the fraud triangle perspective. Then research on publicly traded companies conducted by Yesiariyani & Rahayu (2017) with a diamond fraud perspective. Then research on banking and manufacturing companies conducted by Septriandi and Handayani (2018) with the perspective of the fraud pentagon.

The results of some previous researchers regarding the factors that influence financial statement fraud are still being debated, besides that until now there are still many cases of financial statement fraud that occur, this is what encourages researchers to conduct research in this field. The researcher uses the fraud hexagon perspective as a reference to examine the influence of fraud factors in financial statements. This study uses the fraud hexagon perspective as the basis because this model is the latest model in explaining fraud-related phenomena.

THEORETICAL BASIS

AGENCY THEORY

According to Jensen and Meckling (1976) the agency relationship is described as an agreement between two parties, namely the principal who hires the services of an agent to carry out the interests of the principal by delegating the authority to
make decisions to the agent. In the view of accounting science, agency theory is an understanding that describes the relationship between company management (principal) and company owner (agent) on behalf of the principal in carrying out agreed activities.

The purpose of agency theory is to evaluate the agreement that occurs between the principal and the agent whether it is carried out with what has been agreed or not. Researchers use agency theory because financial statements need to be audited on the basis of agency theory. Financial statements can be used as the basis for making an investor's decision, so the financial statements must be audited by a high-quality auditor and must be free from misstatements.

**FINANCIAL STATEMENT**

According to Munawir (2014) financial statements are the results of accounting activities that will be used as a medium of data communication regarding the company's finances with the parties concerned. According to the Indonesian Accounting Association (IAI) financial statements are a structured presentation of the financial position and performance of a company or organization.

**FRAUD**

According to the Encyclopedia Britannica, fraud is a fraud or a crime legally by presenting the wrong facts that is done intentionally to gain profit. According to James Chen through his article on Investopedia, fraud is an act of deceiving to give advantage to lawbreakers.

**FRAUDELENT STATEMENT FRAUD**

According to the Association of Certified Fraud Examiners (ACFE), financial statement fraud is an activity that is against the law, for example, committing fraud intentionally such as falsifying financial statements provided to users.

**FRAUD HEXAGON**

According to Donald R. Cressey in 1953, the basis for the fraud hexagon perspective is from the fraud triangle perspective. Fraud triangle includes stimulus (pressure), opportunity (opportunity) and attitude (rationalization). Wolfe & Hermanson (2004) added the element of capability as the fourth element. Crowe in 2012 updated his capability in understanding the fraud triangle and fraud diamond into a competence known as the fraud pentagon theory. Siddiq in 2017 added arrogance known as the fraud pentagon theory. Then lastly, Vousinas in 2019 added collusion as the sixth element in fraud known as the fraud hexagon theory.

![Fraud Hexagon Diagram](https://via.placeholder.com/150)

**Pressure**

Pressure includes two characteristics, namely financial and non-financial. Pressures that are financial in nature, for example, such as lifestyle demands, greedy nature, household economic needs and high lifestyle fulfillment. Non-financial pressure, for example, such as increasing financial targets given by the company and the desire of employees to get a good appraisal from the manager on the resulting performance. This is often the motivation for someone to commit fraud. Emotional pressures such as when management is asked to maximize profits and improve the company's operational performance, employees who feel their salaries are not commensurate with the work they do, unfair treatment between employees, no appreciation for the contributions made, and the company taking advantage of employees.
HYPOTHESES

Financial Stability

Financial stability is a condition that provides an overview of the financial condition of a company in a balanced state. Based on SAS No. 99 (AICPA, 2002) what is referred to as pressure is the excessive risk accepted by management in meeting targets due to standards given by the board of directors such as targets in achieving profits from sales activities. The financial stability of a company is seen from the asset growth that occurs in the company.

Previous research was conducted by Kusumosari (2020) using the ratio of changes in assets. The results of the research conducted can be proven that financial stability has a significant influence on fraudulent financial statements. Subsequent research was conducted by Kusumosari & Solikhah (2021). The results of the study are supported by evidence from research by Hanifa (205), Sari (2016), Septriani and Handayani (2018) and Bawekes et al (2018).

Thus, the proposed hypothesis is:

H1 : Financial stability has a positive effect on fraudulent financial reporting

External Pressure

External pressure is excessive pressure given by the board of directors to management to achieve the given target. According to SAS No. 99, fraudulent financial statements occur when external parties exert excessive pressure.

To measure external pressure, leverage ratio is used, which is the result of the ratio of debt divided by total assets. If the value of a company's leverage ratio is high, then the company has failed to pay off its debts. This situation can trigger a management to commit fraud.

Research related to this was carried out by (Annisya, Lindriansari and Asmaranti, 2016) and (Kurnia and Idrianita, 2017) from the results of the two studies it was found that external pressure had no effect on fraudulent financial statements.

Subsequent research was carried out by Mardianto and Tiono (2020) and Ozcelik (2020). Then the research is supported by the results of research by Sihombing and Rahardjo (2014). Thus, the proposed research hypothesis is:

H2 : External pressure has a positive effect on fraudulent financial reporting

Financial Target

In SAS No. 99 (AICPA, 2002) the financial target is the risk of excessive pressure received by management in meeting the financial targets given by the company's directors. Previous research was conducted by Widarti (2015) using ROA to measure financial targets. The results of the research conducted can be proven that the financial target has a positive and significant influence on the occurrence of fraudulent financial reporting. The results of the study are supported by evidence from the results of research by Estu and Bagatus (2019). Meanwhile, research by Kurnia and Anis (2017) shows that financial targets measured using ROA do not have a positive and significant effect on the occurrence of financial statement fraud.

Based on the description above, it can be concluded that the higher the ROA, the higher the pressure received by management in meeting the financial targets given by the company's directors. Thus, the proposed research hypothesis is:

H3 : Financial targets have a positive effect on fraudulent financial reporting

Opportunity

Opportunity is a condition where a person feels there is an opening to commit a crime or fraud. Weak supervision by a company in controlling the company's operational activities can be used as an opportunity or loophole for fraud perpetrators.

Research related to this was carried out by Faradiza (2019). From the results of this study, it was found that opportunity had an influence on the occurrence of fraudulent financial reporting. Then the
research was supported by research results by (Sari and Nugroho, 2020) and (Febrianto & Suryandari, 2019).

Therefore, the research hypothesis proposed is:
H4: Opportunity has a positive effect on fraudulent financial reporting

Rationalization
Rationality is a situation where management seeks justification when fraud has occurred. This justification arises when management does not want their actions to be known so that they tend to justify the manipulation that has been carried out.

Research related to this was carried out by Septriyani and Handayani (2018) from the results of this study it was found that the rationality variable had an influence on financial statement fraud. Subsequent research was carried out by Sidik et al (2017) and Yossi (2018). Then the research is supported by the results of research by Zahara (2017).

Thus, the proposed research hypothesis is:
H5: Rationality has a positive effect on fraudulent financial reporting.

Capability
Capability is a condition where a person is able to commit fraud in a company or organization. Without the element of ability, cheating will be difficult.

Previous research conducted by (Maranung and Hardika, 2015) and (Abdullahi, 2016) the results of the two studies found that capability has an influence on fraudulent financial reporting by using a change of directors. While the research conducted by Handoko (2021), the results of the study found that ability had no effect on the occurrence of financial statement fraud.

Based on the description above, it can be concluded that the higher the ability of a person to commit fraud, the higher the possibility of fraudulent financial statements. Then the research hypothesis proposed is:
H6: Ability to have a positive effect on fraudulent financial reporting.

Arrogance
Arrogance is a person's greedy and selfish attitude with the view that internal control does not apply to him so that mistakes made are natural actions. In a corporate environment, a person's arrogance appears when he has high rights or positions.

Previous research conducted by (Tessa and Harto, 2016) and (Larum, Zuhroh & Subiyantoro, 2020) from the results of the two studies found that in the arrogant nature, the CEO's picture is one of the factors that positively influences financial reporting fraud. Thus the proposed research hypothesis is:
H7: Arrogance has a positive effect on fraudulent financial reporting.

Collusion
Collusion is collaboration between two or more people in taking actions that seem reasonable but have the aim of harming the other party. In the agreement usually money, property and other supporting facilities are involved so that the goals to be achieved run smoothly.

Previous research conducted by (Susandra and Hartina, 2017) and (Handoko, 2021) from the results of the two studies found that collusion has a positive effect on the occurrence of fraudulent financial reporting as measured by using a collaborative project with the government. Then the research was supported by the results of research by Sari & Nugroho (2020).

Thus the proposed research hypothesis is:
H8: Collusion has a positive effect on fraudulent financial reporting

METHOD
Research Samples and Data
In this study, the researcher collected samples using purposive sampling, namely the collection of samples based on certain considerations. Researchers used 16 food and beverage industry sub-sector companies as samples. In this study the sizes selected in sampling are:
1. Manufacturing companies in the consumer goods sub-sector listed on the Indonesia Stock Exchange for the period 2017-2020
2. Annual financial reports issued by manufacturing companies in the consumer goods sub-sector, namely in the 2017-2020 period
3. Financial statements that use rupiah as currency in financial reporting.
4. Financial statements ending December

**Variabel Dependend (Y)**

The dependent variable in this study is financial statement fraud. To detect fraudulent financial statements using the F-Score model. According to Skousen and Twedt (2009) F-Score model is the result of accrual quality plus the quality of financial performance. The formula for the F-Score model is as follows:

\[
F-Score \ model = \text{accrual quality + quality of financial performance}
\]

\[
RSST \ accrual = (\Delta WC + \Delta NCO + AFIN) \ \text{Average total assets}
\]

Financial performance = change in receivables + change in inventories + change in cash sales + change in earnings

Keterangan formula:

- Change in receivables = \( \Delta \text{receivables} \) / Average total assets
- Change in inventories = \( \Delta \text{inventories} \) / Average total assets
- Change in cash sales = \( \Delta \text{sales} - \Delta \text{receivables} \) / \( \text{Sales (t)} - \text{receivables (t)} \)
- Change in earnings = \( \text{earnings (t)} - \text{earnings (t)} \) / Average total assets

**RESULTS AND DISCUSSION**

The descriptive statistical analysis of this study will be presented in the following table:

<table>
<thead>
<tr>
<th>Variabel</th>
<th>n</th>
<th>Max</th>
<th>Min</th>
<th>Mean</th>
<th>Std.Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>64</td>
<td>1,681</td>
<td>-0,697</td>
<td>0,20171</td>
<td>0,397824</td>
</tr>
<tr>
<td>X1</td>
<td>64</td>
<td>1,676</td>
<td>-0,161</td>
<td>0,16773</td>
<td>0,275193</td>
</tr>
<tr>
<td>X2</td>
<td>64</td>
<td>0,950</td>
<td>0,110</td>
<td>0,53403</td>
<td>0,223693</td>
</tr>
<tr>
<td>X3</td>
<td>64</td>
<td>0,212</td>
<td>-0,030</td>
<td>0,02696</td>
<td>0,042800</td>
</tr>
<tr>
<td>X4</td>
<td>64</td>
<td>1,307</td>
<td>11,914</td>
<td>-0,16023</td>
<td>1,538729</td>
</tr>
<tr>
<td>X5</td>
<td>64</td>
<td>1</td>
<td>0</td>
<td>0,23437</td>
<td>0,426956</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variabel</th>
<th>n</th>
<th>Variabel Dummy 0</th>
<th>Variabel Dummy 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDCHANGE</td>
<td>64</td>
<td>76.56%</td>
<td>23.44%</td>
</tr>
<tr>
<td>DCHANGE</td>
<td>64</td>
<td>43.75%</td>
<td>56.25%</td>
</tr>
<tr>
<td>GOVPROJECT</td>
<td>64</td>
<td>10.94%</td>
<td>89.06%</td>
</tr>
</tbody>
</table>

Based on the table above, the data shows that on average the sample companies have low potential to commit fraud, the financial performance of the company is below average which causes the management of a company to get pressure, and the company has the potential to fail to pay off debt. In addition, it is also shown that the average strength of the company in producing profits is only 2.70% of the company's assets owned, the current year's receivables owned by the company in the previous year were lower, only a few companies changed auditors, the average company often did change of directors, CEO photos are not often shown in financial reports, and
companies that often do projects with the government.

Results of the normality test showed that the probability value is 0.033157 <0.05, which means that the data is not normally distributed. The data also showed that there was no heteroscedasticity problem, multicollinearity relationship, and positive or negative autocorrelation.

The results of panel data testing show that the Random Effects Model (REM) is the most appropriate approach in predicting phenomena. The test results show a significance value of 0.090712 which means that the research model is not very good, because the independent variable is not able to explain the dependent variable. This is also shown by the Adjusted R-Squared value of 0.100582, which means that the independent variable is only able to explain 10.06% of the variation of the dependent variable, while the remaining 89.94% is explained by other variables outside the model.

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Coefficient</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KO</td>
<td>-0.121708</td>
<td>0.7088</td>
</tr>
<tr>
<td>SK</td>
<td>0.446083</td>
<td>0.0183</td>
</tr>
<tr>
<td>TE</td>
<td>0.284500</td>
<td>0.2756</td>
</tr>
<tr>
<td>TK</td>
<td>1.014682</td>
<td>0.4391</td>
</tr>
<tr>
<td>KES</td>
<td>0.014135</td>
<td>0.6788</td>
</tr>
<tr>
<td>RAS</td>
<td>0.104934</td>
<td>0.3880</td>
</tr>
<tr>
<td>KEM</td>
<td>-0.203167</td>
<td>0.0619</td>
</tr>
<tr>
<td>ARO</td>
<td>-0.015336</td>
<td>0.6965</td>
</tr>
<tr>
<td>KOL</td>
<td>0.200244</td>
<td>0.2667</td>
</tr>
</tbody>
</table>

The table above is the result of the panel data regression equation. The equation formula used is:

\[
\text{KPK} = -0.12708 + 0.446083\text{SK} + 0.284500\text{TE} + 1.014682\text{TK} + 0.014135\text{KES} + 0.104934\text{RAS} - 0.203167\text{KEM} - 0.15336\text{ARO} + 0.20244\text{KOL}
\]

The results of panel data testing show that only hypothesis 1 is supported. This is indicated by a p value of 0.0183 which is smaller than = 0.05 and a positive beta value, it means that the financial stability variable has a positive influence on the occurrence of financial statement fraud. If a company experiences high asset growth, it will cause the company's financial stability to be high. This will be an impetus for a management to commit fraudulent financial statements. While the other variables indicate that there is no data support for the proposed hypothesis. This can be seen from the p value, all of which are above 0.05. The results of this study are in line with research conducted by Mukaromah & Budiwitjaksono (2021), Sari & Nugroho (2020), Faradiza (2019) and Iqbal & Murtanto (2016).

**CONCLUSION**

From the results it can be concluded that there is only one variable that has a positive influence on financial statement fraud as predicted, namely financial stability, and one variable that has a negative influence on financial statement fraud, namely opportunity. There are six variables that have no influence on financial statement fraud, namely external pressure, financial targets, rationality, ability, arrogance and collusion. The test results show that only the variable of economic stability is the determinant of a company committing fraud in the financial statements. While opportunity is a determining variable in companies committing fraud, but in the opposite direction from what was predicted. This means that the higher the opportunities that arise, the smaller the fraud committed by the company.

Some limitations in this study are the number of samples that are still lacking and a proxy for rationality. The measurement of the rationality variable that is proxied by seeing how often companies change auditors is seen as less effective to see the potential for financial statements because if a company changes auditors, it is not to cover up fraud committed by the old auditor but because of regulations set by the government, a KAP rotation must be held once every 5 years. Suggestions for further
research are to increase the number of samples and use other proxies such as the total accrual ratio because it allows revealing the activities carried out by management in manipulating income.

REFERENCES


