

PENTAGON FRAUD ANALYSIS IN DETECTING THE FINANCIAL STATEMENT FRAUD USING BENEISH M-SCORE MODEL (EMPIRICAL STUDY ON MANUFACTURING COMPANIES IN THE CONSUMER GOODS INDUSTRY SECTOR LISTED IN INDONESIA STOCK EXCHANGE 2014-2018)

1stSara Nuranggraini, 2nd Muhammad Yusuf

Accounting

Sekolah Tinggi Ilmu Ekonomi Indonesia

DKI Jakarta, Indonesia

[Saranuranggraini1601 @ gmail.com](mailto:Saranuranggraini1601@gmail.com); myusuf@stei.ac.id

Abstract - Fraud is an intentional act by one or more individuals in management or those charged with governance, employees, and third parties that involve the use of deception to gain an advantage unfairly or violating the law. According to the Association of Certified Fraud Examiners, there are several types of fraud, including corruption, asset misappropriation, and fraudulent statement. This study aims to provide empirical evidence about the effect of fraud pentagon analysis in detecting financial statement fraud using beneish M-Score model in manufacturing companies of the consumer goods sector which are listed on the Indonesia Stock Exchange in 2014-2018. The sampling method used in this study was a purposive sampling method with a sample of 21 companies during the observation period of 5 years in a row so that the total sample was 105. Hypothesis testing was performed using the multiple linear regression method with SPSS 21 software. The results of this study prove that financial stability, effective monitoring, auditor's opinion, change in directors can be used in detecting financial statement fraud. Meanwhile frequent numbers of CEO's pictures can't be used in detecting financial fraud.

Keywords: Financial Stability, Ineffective Monitoring, Auditor's Opinion, Change in Directors, Frequent Number of CEO's Pictures, Financial Statement Fraud

Abstrak – Fraud adalah tindakan yang disengaja oleh satu atau lebih individu dalam manajemen atau pihak yang bertanggung jawab atas tata kelola, karyawan, dan pihak ketiga yang melibatkan penggunaan penipuan untuk mendapatkan keuntungan secara tidak adil atau melanggar hukum. Menurut Asosiasi of Certified Fraud Examiners terdapat beberapa jenis penipuan, antara lain korupsi, penyalahgunaan asset, dan pernyataan penipuan. Penelitian ini bertujuan untuk memberikan bukti empiris tentang

pengaruh analisis fraud pentagon dalam mendeteksi kecurangan laporan keuangan dengan menggunakan Beneish M-Score pada perusahaan manufaktur sektor industri barang konsumsi yang terdaftar di Bursa Efek Indonesia tahun 2014-2018. Metode pengambilan sampel yang digunakan dalam penelitian ini adalah metode purposive sampling dengan jumlah sampel 21 perusahaan selama periode pengamatan 5 tahun berturut-turut sehingga jumlah sampel sebanyak 105. Pengujian hipotesis dilakukan dengan menggunakan metode regresi linier berganda dengan software SPSS 21. Hasil penelitian ini membuktikan bahwa stabilitas keuangan, pengawasan yang tidak efektif, opini auditor, perubahan direksi dapat digunakan dalam mendeteksi kecurangan laporan keuangan. Sementara frekuensi foto CEO tidak dapat digunakan untuk mendeteksi kecurangan laporan keuangan.

Kata Kunci: *Financial Stability, Ineffective Monitoring, Auditor's Opinion, Change in Directors, Frequent Number of CEO's Pictures, Financial Statement Fraud*

I. INTRODUCTION

The financial report is the basis used by users of financial information to determine the performance of a company, as well as a means of communication from the entity to interested parties to convey conditions related to the company's financial condition. Based on the information that has been obtained from financial reports, users of financial statement information can make financial economic decisions. Many companies work hard to keep the company's finances stable and continue to increase so that the company still gets good marks from users of financial statement information in the capital market, so that there is a demand from users of financial statements. With this,

Fraud is an intentional act by one or more individuals in management or those responsible for governance, employees, and third parties that involves the use of deception to gain an unfair advantage or violate laws. Apart from showing the financial stability of the company, another reason for cheating is so that the financial statements look good, by presenting high profits so that many investors are tempted to invest in the company. Not only that, the effect is that the management will also get a bonus for the profit maximizing "effort".

The consequences of fraud for investors are that it will mislead investors as users of financial statements, when there is material misstatement in the financial statements, the information is not valid to be used as a basis for making investment decisions because the analysis is not based on actual information (Molida, 2014).). Then for the company, of course, the image of the company will be tarnished so that it will reduce public confidence in the company. Fraud not only damages public confidence, especially investors, but also damages the values of accounting principles themselves.

One of the companies that was involved in the fraud scandal is PT Garuda Indonesia. PT Garuda Indonesia, one of the companies indicated had misstated its financial statements. PT Garuda Indonesia surprised the public after announcing a net profit for 2018 of US \$ 809.85 thousand or equivalent to Rp.11.33 billion (assuming an exchange rate of Rp.14,000 per US \$) after suffering a loss of US \$ 216.5 million in the previous year. It seems that in preparing the financial report, PT Garuda included revenue from cooperation with PT Mahata Aero Teknologi, which has debts related to the installation of unpaid wifi. The financial statements of PT Garuda Indonesia are deemed incompatible with the Statement of Financial Accounting Standards (PSAK). This case also dragged the Public Accountant Office (KAP) Tanubranta Sutanto Fahmi Bambang &

Apart from PT Garuda Indonesia, there are several companies in Indonesia that are also indicated to have committed fraud in their financial reports, including PT Hanson Internasional Tbk

and PT Tiga Pilar Sejahtera Tbk. Apart from Indonesia, violations of financial reports have also happened to companies abroad, including Enron, WorldCom, and Satyam Computer Service.

As time goes by and the results of the evaluation of each fraudulent financial statement that occurs, conditions are made that allow the perpetrator of fraud to commit fraud in the financial statements. Like the theory that was first coined in 1953 by Cressey which we know as the Fraud Triangle Theory. In this theory, it is said that fraudulent financial reporting occurs accompanied by three conditions, namely pressure, opportunity, and rationalization.

Then in 2004, Wolfe and Hermason developed the fraud triangle theory that Cressey had previously proposed. This theory is known as the Fraud Diamond Theory. Wolfe and Hermanson add one qualitative element that is believed to have a significant influence on fraud, namely the capability of this which creates The New Fraud Diamond.

And in 2011, Crowe Howard developed conditions that allow a person or group to commit financial statement fraud. This theory adds an element of arrogance as a complement to the theories that have been stated previously. This theory is known as the Fraud Pentagon Theory because it contains five conditions, namely pressure, opportunity, rationalization, capability, and arrogance.

Based on the cases of fraud committed by several companies above, as well as the inconsistency of the results of previous studies regarding the conditions that underlie the occurrence of fraudulent financial statements, this is the basis for the writing of this study. There are several factors that underlie a person or management in committing fraud on financial reports, namely pressure, opportunity, rationalization, capability, and arrogance. This study intends to examine the fraud pentagon analysis in detecting financial statement fraud using the Beneish M-Score model. This study uses an empirical study of manufacturing companies in the consumer goods industry listed on the Indonesia Stock Exchange in 2014-2018.

II. THEORY BASIS AND HYPOTHESIS DEVELOPMENT

Agency Theory

Agency theory is a contract involving one or more people, in this case the principal employs another person (agent) with the aim of providing a service and delegating to the agent the authority to make the right and best decision for the principal (Jensen and Meckling, 1976).

In agency theory, shareholders (principals) and company managers (agent) both have their respective roles and interests. Management is entrusted with managing the company and given the power to make the best decisions which are then accountable to the shareholders. Agency theory becomes a business reference and is a basic foundation in the company. This theory provides a description of the correlation or relationship between the principal and the agent (management) on the nexus of contract or cooperation agreement.

When the contract has been mutually agreed upon, the parties have high hopes that the contract will be maximally achieved. Shareholders (principals) certainly really expect high returns on the investment they have made. Even so with company management (agents) who really hope for appreciation from the principal such as financial compensation if the company can maximize the objectives of the contract.

Fraud

G. Jack Bologna, Robert J. Lindquist, and Joseph T. Wells cited by Wardhani (2012) define fraud as "Fraud is criminal deception intended to financially benefit the deceiver", that is, fraud is a criminal fraud that intends to provide financial benefits to the fraudster. Criminal here means any serious wrongdoing committed with malicious intent.

Fraud or better known as fraud is a deliberate act by irresponsible parties to gain personal gain by harming others. In this case, fraud that will be discussed further is fraud committed against

financial statements. There are many motives that underlie this fraud, which is basically just to take advantage but in an illegal way.

Fraud Classification

Association of Certified Fraud Examiners (2016) divides fraud into three types based on actions, including the following:

1. *Asset Misappropriation* is a deviation of assets.
Fraud This type is the most classic type of fraud and the easiest to detect because it is tangible or can be measured and calculated.
2. *Fraudulent statement* constitute fraudulent or false statements or reports.
The perpetrator in the fraudulent statement is usually a manager because the majority of actors are at the managerial level, who are officials or executives and senior managers.
3. *Corruption* (corruption) is a type of fraud that is difficult to detect.
This type of fraud is carried out by collaborating with other parties or what is commonly known as collusion. Corruption is divided into conflicts of interest, bribery (bribery), illegal gratuity, and economic extortion.

Association of Certified Fraud Examiner (2016) also classifies fraud on financial statements into two types, namely:

1. Higher assignment of company assets or profits (earning overstatement);
2. Lower assignment of company assets or profits (earning understatement).

Financial Statement Fraud

Association of Certified Fraud Examiners (2016) state that financial statement fraud is a deliberate error in the financial condition of a company that is achieved through misstatement or negligence in disclosing the number of figures in the financial statements to deceive users of financial statements. This fraud can be financial and non-financial.

Financial statement fraud can be detected using the Beneish M-Score Model. Beneish (1999) M-Score is a mathematical model that formulates several ratio analyzes and consists of eight variables to identify the occurrence of financial fraud or the tendency to engage in manipulation. This Beneish M-Score uses company data then calculates the company's financial ratios to determine whether there are conditions that allow fraud. The Beneish Ratio Index that is used to detect manipulation in the financial statements includes the Days Sales in Receivables Index (DSRI), Gross Margin Index (GMI), Asset Quality Index (AQI), Sales Growth Index (SGI), Depreciation Index (DEPI), Sales General and Administrative Expenses Index (SGAI), Leverage Index (LVGI),

Pressure

Pressure means that a situation in which a person feels pressured, in a difficult condition when facing difficulties, something that can make a person increase attention in taking action, improve memory and the ability to remember. Thus pressure can increase performance. Pressure can be an impetus that causes someone to commit fraud. According to No. SAS 99, there are four types of conditions that commonly occur in pressure that can lead to cheating. Namely financial stability, external pressure, personal financial need, and financial targets.

In this study, researchers chose financial stability as a proxy for pressure as a factor that can detect the occurrence of fraudulent financial statements in a company. When a company is unable to maintain its financial stability, there will be a lot of pressure arising from investors, creditors, and the public so that the company can improve its performance. Management will of course try in various ways to meet these demands. Not to mention, if a company has decreased its assets from year to year compared to companies in other similar industries, investors, creditors and other stakeholders are not interested, because the company's condition is considered unstable (Kurnia and Anis, 2017).

Opportunity

Opportunities are opportunities that can be understood as situations and conditions that exist in each person or individual. These situations and conditions allow someone to act or carry out activities that allow fraud to occur. Fraud can occur due to inefficient internal control, lack of supervision, and / or abuse of authority. SAS No. 99 states that opportunities in financial statement fraud can occur in several conditions, namely the nature of industry, effective monitoring, quality of external auditors, and organizational structure.

In this study, researchers chose ineffective monitoring as a proxy for the opportunity which is a factor that can detect the occurrence of fraudulent financial statements in a company. Ineffective monitoring can occur because there is management dominance by one person and / or a small group without control, and the ineffectiveness of the board of directors and independent commissioners in preparing financial reports and internal control (Skousen et al., 2009). The maximum operation of the supervisory function should be able to reduce fraud. The board of commissioners is tasked with ensuring the implementation of the company's strategy, supervises management in managing the company and requires accountability. (Forum for Corporate Governance Indonesia, 2003).

Rationalization

Rationalization can be interpreted as an act of seeking justification by people who feel themselves trapped in a bad situation. Rationalization is a lifestyle in society that is not in accordance with the unifying principle, rationalization indirectly provides a way to justify actions that are not in accordance with existing circumstances. According to No. SAS 99 rationalization in the company can be measured by the auditor change cycle (change in auditor), the audit opinion obtained by the company, and total accruals to total assets.

In this study, researchers chose auditor's opinion as a proxy for rationalization, which is a factor that can detect fraudulent financial statements in a company. The auditor's opinion is one of the things that investors consider before deciding to invest in a company. The auditor's opinion is used as an indicator to determine whether a company's financial performance is good or not. External auditors need to identify and consider risk factors that cause their audit clients to commit fraudulent acts (Sukirman and Sari, 2013).

Capability

A person's capability in taking advantage of opportunities to commit fraud, so that the action can run well. Capability can be measured by the change of company directors. Wolfe and Hermanson (2004) state that a change of directors can be an attempt by a company to improve the performance of its previous directors. By making these changes, it is assumed that the new directors are considered to be more competent in their fields. This change of directors can also show certain political interests to replace the previous directors.

Sihombing and Rahardjo (2014) explain that changes in the board of directors are generally laden with political content and the interests of certain parties that trigger a conflict of interest. The change of directors can be indicated as an attempt to remove evidence of company fraud that may have been known to the previous directors. With this replacement of the board of directors, of course it will lead to a long adaptation so that the initial performance is not optimal.

Arrogance

Arrogance is an attitude of superiority over rights and feels that internal control or company policy does not apply to someone who has a position in the company (Howarth, 2011). They believe that the prevailing regulations will not be able to restrict them from doing anything with the position they have. Howarth (2011) also reveals that many crimes are revealed without reasons of economic

gain based on selfishness, status, and arrogance. The frequent number of CEO's picture is a proxy used in measuring the level of arrogance in its effect on financial statement fraud.

In this study, arrogance is proxied by the total photos of the CEO displayed on a company's annual financial report. The more the number of CEO photos in the company's annual financial report, the more it will make a CEO feel that he has unmatched power. They feel that with their high position, the regulations and punishment in the company do not apply to them, including in committing fraud. That way, when the company experiences a decline in financial performance, the CEO can carry out earnings management freely because he feels he has the right to do so.

Hypothesis Development

Pressure as a variable that affects the occurrence of financial statement fraud

The existence of pressure from financial stability on the entity's business conditions can be indicated by the level of fierce business competition, high vulnerability to very rapid changes such as changes in technology, interest rates, and foreign exchange rates which can affect financial stability (Hanifa and Herry, 2015). . If the company is able to maintain a stable financial condition, then the value of the company will increase, which is likely to impact investment inflows from investors. However, when a company is unable to maintain its financial stability, there will be a lot of pressure arising from investors, creditors, and the public so that the company can improve its performance. Not again, if the company has decreased assets from year compared to companies in other similar industries, investors, creditors, and other stakeholders will be disinterested, because the company's condition is considered unstable (Kurnia and Anis, 2017).

Pressure which can cause a decrease in the performance of management, so that management will cover the company's unstable financial condition by manipulating financial statements. This is similar to the results of a study by Bawekes et al. (2018) which states that financial stability has an effect on financial statement fraud. Also supported by the research of Siddiq et al. (2017) which states that financial stability has a positive effect on financial statement fraud.

Based on this description, the following research hypothesis is proposed:

H1: Financial stability can be used to detect financial statement fraud.

Opportunity as a variable that affects the financial statement

Ineffective monitoring can occur because there is management dominance by one person and / or a small group without control, and the ineffectiveness of the board of directors and independent commissioners in the preparation of financial statements and internal control (Skousen et al., 2009). Agustina and Pratomo (2019) in their research stated that opportunities have a positive effect on financial statement fraud.

Based on this description, the following research hypothesis is proposed:

H2: Ineffective monitoring can be used to detect financial statement fraud.

Rationalization as a variable that affects the financial statement

Shelton (2014) says that rationalization is how to justify his thoughts in committing crimes. One of the proxies of rationalization is the auditor's opinion. The auditor's opinion is used as an indicator to determine whether a company's financial performance is good or not. External auditors need to identify and consider risk factors that cause their audit clients to commit fraudulent acts (Sukirman and Sari, 2013).

This is in line with research conducted by Ulfah et al. (2017) which states that the auditor's opinion has a positive effect on financial statement fraud. Including Sarpta's research (2018) which states that auditor opinion affects financial statement fraud.

Based on this description, the following research hypothesis is proposed:

H3: Auditor's opinion can be used to detect financial statement fraud.

Capability as a variable that affects the financial statement

Capability meaningful about how much power and capacity of a person or company management in conducting fraudulent financial statements. Proxy used in identifying whether *capability* has a deep influence financial statement fraud is change in director (change of directors). Sihombing and Rahardjo (2014) explain that changes in the board of directors are generally laden with political content and the interests of certain parties that trigger a conflict of interest. The change of directors can be indicated as an attempt to remove evidence of company fraud that may have been known to the previous directors. Siddiq et al. (2018) stated that the change of directors had a positive but insignificant effect on financial statement fraud.

Based on this description, the following research hypothesis is proposed:

H4: Change in director can be used to detect financial statement fraud.

Arrogance as a variable that affects the financial statement

Arrogance is said to trigger fraudulent financial statements due to an arrogant attitude in a person so that he feels that the rules that apply in the company do not apply to him. Arrogance is often associated with the position of a CEO in a company, because of a high position in the company, the CEO is considered able to ignore the rules or SOPs that apply to the company.

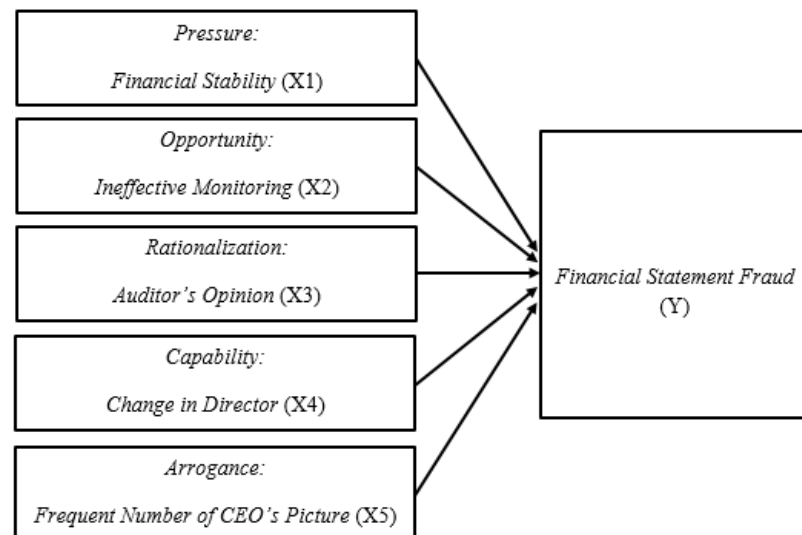
Research from Tessa and Harto (2016) suggests that a CEO tends to show everyone the status and position he has in the company because they don't want to lose that status or position. In this study, arrogance is proxied by the total photos of the CEO displayed on a company's annual financial report. The more the number of CEO photos in the company's annual financial report, the more it will make a CEO feel that he has unmatched power.

Siddiq et al. (2017) in his research said that *frequent number of CEO's picture* effect on *financial statement fraud*.

Based on this description, the following research hypothesis is proposed:

H5: Frequent number of CEO's picture can be used to detect financial statement fraud.

Research Conceptual Framework



III. RESEARCH METHODS

Population and Sample

The population is the whole object of research that has certain characteristics. The population in this study were all manufacturing companies in the consumer goods industry sector listed on the Indonesia Stock Exchange that publishes financial reports (audited) for the 2014 to 2018 financial years. The sample in this study was selected based on the purposive sampling method. The following are the sample selection criteria in this study:

1. Manufacturing companies in the consumer goods industry listed on the Indonesia Stock Exchange from 2014 to 2018.
2. Manufacturing companies in the consumer goods industry sector that have published complete annual financial reports from 2014 to 2018.
3. Manufacturing companies in the consumer goods industry listed on the Indonesia Stock Exchange did not experience delisting from 2014 to 2018.
4. Have complete data related to the variables in this study from 2014 to 2018.
5. The company did not change sectors between 2014 and 2018.

Dependent Variable (Y)

The dependent variable in this study is financial statement fraud calculated by the Beneish M-Score formula (Beneish, 1999), including the following:

Days Sales in Receivable Index (DSRI)

Index of the number of days in receipt of receivables on sales (DSRI), this ratio compares trade receivables to sales generated by the company in one year (t) and the previous year (t-1).

The formula used in measuring the Days Sales in Receivable Index (DSRI) is:

$$DSRI = \frac{Net\ Receivable\ t / sales\ t}{Net\ Receivable\ t - 1 / sales\ t - 1}$$

Beneish (1999) states that if $DSRI > 1$, this indicates an increase in the amount of trade receivables owned. This condition indicates an earning overstatement.

Gross Margin Index (GMI)

Gross margin index (GMI), this ratio compares the gross profit generated in a year (t) and the previous year. Gross margin index (GMI) is a ratio that measures the level of a company's profitability, where this ratio represents the company's future prospects.

The formula used in measuring the Gross Margin Index (GMI) is:

$$GMI = \frac{(Sales\ t - 1 - COGS\ t - 1) / sales\ t - 1}{(Sales\ t - COGS\ t) / sales\ t}$$

Beneish (1999) states that if $GMI > 1$, this indicates a decrease in the company's gross profit, which represents a decline in the company's prospects. This condition indicates an earning overstatement.

Asset Quality Index (AQI)

Asset quality index (AQI), this ratio compares the non-current assets owned by a company other than fixed assets with the company's total assets in one year (t) and the previous year (t-1). The asset quality index (AQI) shows the quality of the company's non-standard assets that are likely to provide benefits to the company in the future.

The formula used in measuring the Asset Quality Index (AQI) is:

$$AQI = \frac{1 - (Current\ Asset\ t + PP\&E\ t + Securities\ t) / Total\ Assets}{1 - (Current\ Assets\ t - 1 + PP\&E\ t - 1 + Securities\ t - 1) / Total\ Assets\ t - 1}$$

Beneish (1999) states that if $AQI > 1$, this indicates a decrease in asset quality, which represents an increase in the number of non-current assets that can provide benefits in the future and an increase in the amount of deferred expenses. This condition indicates an earning overstatement.

Sales Growth Index (SGI)

Sales growth index (SGI), this ratio compares sales in one year (t) and the previous year (t-1). The formula used in measuring the Sales Growth Index (SGI) is:

$$SGI = \frac{Sales\ t}{Sales\ t - 1}$$

Beneish (1999) states that if $SGI > 1$, it indicates an earning overstatement.

Depreciation Index (DEPI)

Index of depreciation expense (DEPI), this ratio compares depreciation expense to fixed assets before depreciation in one year (t) and the previous year (t-1).

The formula used in measuring the Depreciation Index (DEPI) is:

$$DEPI = \frac{Depreciation\ t - 1 / (PP\&E\ t - 1 + Depreciation\ t - 1)}{Depreciation\ t / (PP\&E\ t + Depreciation\ t)}$$

Beneish (1999) states that if $DEPI > 1$, this indicates a decrease in the depreciation of fixed assets, while a decrease in this ratio indicates an increase in the depreciation rate of fixed assets. This condition indicates an earning overstatement.

Sales General and Administrative Expense Index (SGAI)

Index of selling, general and administrative expenses (SGAI), this ratio compares selling, general, and administrative expenses to sales in one year (t) and the previous year (t-1).

The formula used in measuring the Sales General and Administrative Index (SGAI) is:

$$SGAI = \frac{SG\&A\ Expense\ t / Sales\ t}{SG\&A\ Expense\ t - 1 / Sales\ t - 1}$$

Beneish (1999) states that if $SGAI < 1$, then this indicates a decrease in company operating expenses or an increase in sales. This condition indicates an earning overstatement.

Leverage Index (LVGI)

Index on the level of debt (LVGI), this ratio compares the amount of debt to total assets in one year (t) and the previous year (t-1). The purpose of this ratio is to find out how the level of debt the company has against the company's total assets from year to year.

The formula used in measuring the Leverage Index (LVGI) is:

$$LVGI = \frac{(Long\ Term\ Debt + Current\ Liabilities) / Total\ Asset\ t}{(Long\ Term\ Debt + Current\ Liabilities) / Total\ Asset\ t - 1}$$

Beneish (1999) states that if $LVGI > 1$, then this indicates that there is an increase in the debt composition of all assets owned by the company, while a decrease in this ratio indicates a decrease in the amount of debt owned by the company. This indicates the potential condition of the company for earning overstatement to fulfill its obligations.

Total Accrual to Total Asset (SYSTEM)

Total accruals to total assets, high total accruals indicate the high amount of accrual earnings owned by the company. This shows that the amount of cash on profit generated is low.

The formula used in measuring Total Accrual to Total Asset (TATA) is:

$$TATA = \frac{Income\ from\ Continuing\ Operation\ t - Cash\ Flow\ from\ Operation\ t}{Total\ Assets\ t}$$

Beneish (1999) states that a high (positive) TATA value indicates a company's potential condition for earning overstatement through an increase in accrual transactions in revenue recognition.

Independent Variable (X)

Financial Stability (X1)

Financial stability is a condition that describes the company's financial condition in stable condition. An assessment of a company's financial stability is assessed based on the state of its assets. Total assets describe the wealth owned by the company. Total assets include current assets and fixed assets. The greater the ratio of changes in total assets, the higher the fraudulent financial reporting. Financial stability is proxied by ACHANGE, which is the ratio of changes in assets for two years (Skousen et al., 2009).

ACHANGE in this study is calculated by the following formula:

$$ACHANGE = \frac{Total Asset t - Total Asset t - 1}{Total Assets t - 1}$$

Ineffective Monitoring (X2)

Ineffective monitoring is a situation where there is no internal control that runs effectively within the company. The dominance of management by one person or small group, without compensation control, ineffective supervision of the board of directors and audit committee over the financial reporting process and internal control and the like can lead to ineffective supervision (SAS No. 99). To prevent fraud, another party is needed, namely an independent board of commissioners (Martantya and Daljono, 2013). In this study proxies effective monitoring on the ratio of the number of independent commissioners (BDOUT), with the following formula:

$$BDOUT = \frac{Jumlah Dewan Komisaris Independen}{Jumlah Total Dewan Komisaris}$$

Auditor's Opinion(X3)

The audit opinion will be obtained by the company on the company's financial statements after an audit by the auditor. Auditors can provide various opinions in accordance with the circumstances of the company being audited. An auditor is required to have integrity, so that the opinion can be trusted by users of financial statement information. One of the auditors' opinions is fair without exception with explanatory sentences, this opinion is a tolerant form of the auditor's earnings management (Varmer, 2003 in Fimanaya and Syafruddin, 2014). Auditor's opinion is measured using dummy variables, if the company gets an unqualified opinion with explanatory language during the study period, it will be coded 1, but if the company gets an opinion other than that opinion, it will be coded 0.

Change in Directors (X4)

Changing the board of directors can be a company effort to improve the performance of the previous directors by changing the composition of the board of directors or recruiting new directors who are considered more competent (Tessa and Harto, 2016). Changes in the board of directors will cause a stress period that will open up opportunities for fraud (Wolfe and Hermason, 2004). Changing the board of directors is considered to reduce effectiveness at work, because it takes time to adapt to the new board of directors (Nurmulina and Sasongko, 2018). In this study, change in director is proxied by a dummy variable, if there is a change of directors in the company during the study period, it is given code 1, but if there is no change in the board of directors, it will be coded 0.

Frequent Number of CEO's Pictures (X5)

The number of frequent numbers of CEO's pictures or the number of CEOs displayed on the company's annual financial statements can represent the level of superiority or arrogance of the CEO (Ismawati, 2019). A high level of arrogance can lead to fraud because the arrogance and superiority of a CEO makes the CEO feel that any internal control will not apply to him because of his status and position (Tessa and Harto, 2016). In this study, the frequent number of CEO's pictures is measured by looking at the total CEO photos displayed in the annual financial reports (Nurmulina and Sasongko, 2018).

Data analysis method

The data analysis technique used to test the research hypothesis is descriptive statistics, classic assumption tests which include normality test, multicollinearity test, autocorrelation test and heteroscedasticity test. Hypothesis testing is done using multiple regression analysis models using the following regression equation:

$$M\text{-Score} = \beta_0 + \beta_1 ACHANGE + \beta_2 BDOUT + \beta_3 OPNADT + \beta_4 DCHANGE + \beta_5 CEOPIC + \epsilon_i$$

Information :

β	= Constant regression coefficient
$\beta_1, 2, 3, 4, 5$	= The regression coefficient for each proxy
<i>M-Score</i>	= Financial statement fraud
<i>ACHANGE</i>	= <i>Financial stability</i>
<i>BDOUT</i>	= <i>Ineffective monitoring</i>
<i>OPNADT</i>	= <i>Auditor's opinion</i>
<i>DCHANGE</i>	= <i>Change in directors</i>
<i>CEOPIC</i>	= <i>Frequent number of CEO's picture</i>
ϵ	= <i>Error term</i>

IV. ANALYSIS RESULTS AND DISCUSSION

Descriptive Statistical Analysis Research Results

Table 4.1 Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
M-SCORE	105	.00000	8.42802	1.0492579	.97362021
ACHANGE	105	.00000	.62034	.1210188	.12813329
BDOUT	105	.00000	4,000,000	1.6666667	.89514359
AUDITOR'S OPINION	105	1,00000	1,00000	1.0000000	.00000000
CHANGE IN DIRECTORS	105	.00000	1,00000	.4285714	.49724516
CEO'S PICTURE	105	.00000	1,00000	.8666667	.34156503
Valid N (listwise)	105				

Source: Data processed, 2020

From table 4.1, several things can be explained as follows:

1. N is the number of valid or valid data to be processed as many as 105 data.
2. The dependent variable for financial statement fraud is proxied by the M-Score, based on the data obtained, it shows that the M-Score value as a proxy for financial statement fraud ranges from 0.00000 to 8.42802, with an average of 1.0492579, and a standard deviation. 0.97362021.
3. The financial stability variable is proxied by changes in assets (ACHANGE), based on the data obtained, it shows that the minimum value of ACHANGE is 0.00000 (0%) and the maximum value is 0.62034 (62.034%). Meanwhile, the average value of ACHANGE is 0.1210188 (12.10188%).

4. The ineffective monitoring variable is proxied by the number of independent commissioners (BDOUT), based on the data obtained, it shows that the minimum BDOUT value is 0.00000 (0%) and the maximum value is 4.00000 (400%). Meanwhile, the average value for BDOUT is 1.6666667.
5. The auditor's opinion variable based on the data obtained shows that the minimum and maximum values are the same, namely 1.00000 (100%). Meanwhile, the average value is also 1,00000 (100%).
6. The change in director variable based on the data obtained shows that the minimum value is 0.00000 and the maximum value is 1.00000. Meanwhile, the average DCHANGE value is 0.4285714.
7. Based on the data obtained, the variable frequent number of CEO's pictures shows a minimum value of 0.00000 and a maximum value of 1.00000. Meanwhile, the average value of the CEO of PICTURE was 0.8666667.

Classical Assumption Test Results

Normality Test Results

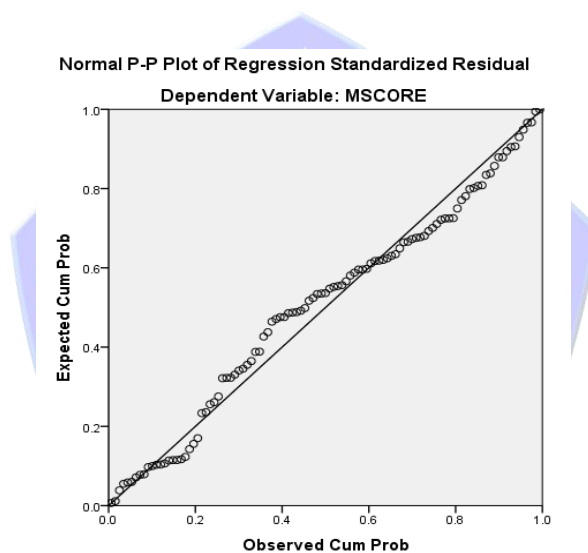


Figure 4.1 Residual Normality Test Results

Source: Data processed, 2020

Based on Figure 4.1, it can be seen that the results of graph analysis using a normal graph plot show that each variable used is normally distributed. This is evidenced by the distribution of data that follows the diagonal line. Thus the model meets the requirements of the normality test assumption.

Multicollinearity Test Results

Table 4.2 Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
ACHANGE	.811	1,233
BDOUT	.971	1,030
1 AUDITOR'S OPINION	.812	1,232
CHANGE IN DIRECTORS	.986	1,014
CEO'S PICTURES	.972	1,029

a. Dependent Variable: Financial Statement Fraud

Source: Data processed, 2020

Table 4.2 shows that no independent variable has a tolerance value less than 0.1, meaning there is no correlation between independent variables and all VIF values are less than 10. So it can be concluded that the regression model is free from multicollinearity and the data is feasible to use in the regression model. .

Autocorrelation Test Results

Table 4.3 Autocorrelation Test Results

Model Summary b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.705a	.497	.471	.7078420	2,115

a. Predictors: (Constant), ACHANGE, BDOUT, AUDITOR'S OPINION, CHANGE IN DIRECTORS, CEO'S PICTURES.

b. Dependent Variable: M-SCORE

Source: Data processed, 2020

Based on table 4.3, it shows that the Durbin Watson value is 2.115, this value will be compared with the Durbin Watson table value using a significant value of 5% from the table, the value $d_u = 1.7827$ and $4 - d_u = 2.2173$. Therefore, the value of $d_u < d < 4 - d_u$ or $1.7827 < 2.115 < 2.2173$, it can be concluded that there is no autocorrelation either positive or negative.

Heteroscedasticity Test Results

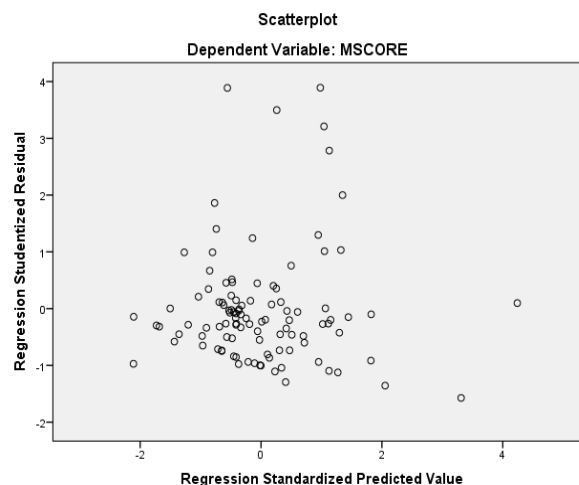


Figure 4.2 Heteroscedasticity Test Results

a. Predictors: (Constant), ACHANGE, BDOUT, AUDITOR'S OPINION, CHANGE IN DIRECTORS, CEO'S PICTURES.

b. Dependent Variable: M-SCORE

Source: Data processed in 2020

Figure 4.2 shows that the plot spreads evenly above and below the 0 axis and does not form a certain pattern. Thus, it can be concluded that this model homoscedasticity or heteroscedasticity does not occur in the data used in this regression model.

Multiple Linear Analysis

Table 4.4 Multiple linear regression

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	-1,827	.368		-4,971	.000
	ACHANGE	3,118	.601	.410	5,185	.001
	BDOUT	.048	.079	.044	.612	.042
	AUDIT OPINION	2,438	.250	.771	9,749	.000
	CHANGE DIRECTORS	.083	.141	.042	.589	.004
	CEO'S PICTURES	.093	.206	.033	.452	.653

b. Dependent Variable: M-Score

Source: Data processed, 2020

Based on the results of the above analysis, the regression equation is as follows:

$$M\text{-Score} = \beta_0 + \beta_1 ACHANGE + \beta_2 BDOUT + \beta_3 OPNADT + \beta_4 DCHANGE + \beta_5 CEOPICT + \varepsilon$$

$$M\text{-Score} = -1,827 + 3,118 ACHANGE + 0.048 BDOUT + 2,438 OPNADT + 0.083 DCHANGE + 0.093 CEOPICT + \varepsilon_i$$

Hypothesis Testing

Determinant Coefficient Test (R²)

Table 4.5 Determination Coefficient Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.705a	.497	.471	.7078420	2,115

a. Predictors: (Constant), ACHANGE, BDOUT, AUDITOR'S OPINION, CHANGE IN DIRECTORS, CEO'S PICTURES.

b. Dependent Variable: M-SCORE

Source: Data processed, 2020

Based on the table above shows the R Square value of 0.497 with an Adjusted R Square value of 0.471 < 0.5 which indicates that the variable financial stability, effective monitoring, auditor's opinion, change in director, and frequent number of CEO's pictures have an effect of 47.1% on financial statement fraud. Meanwhile, 52.9% is influenced by variables not studied.

Concurrent Regression Coefficient Test (F-Test)

Table 4.6 Simultaneous (F)

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48,982	5	9,796	19,552	.000b
	Residual	49,603	99	.501		
	Total	98,585	104			

a. Dependent Variable: M-SCORE

b. Predictors: ACHANGE, BDOUT, AUDITOR'S OPINION, CHANGE IN DIRECTORS, CEO'S PICTURES.

Source: Data processed, 2020

Based on table 4.5, it can be explained that there is a simultaneous influence of the pressure variable proxied by financial stability, the opportunity variable proxied by effective monitoring, the rationalization variable proxied by the auditor's opinion, the variable capability proxied by change in directors, and the arrogance variable proxied by frequent number of CEO's pictures. This is evidenced by the sig value of the F test of $0.000 < 0.05$ provided that $F_{\text{count}} > F_{\text{table}}$ or $19.552 > 2.30$.

Partial Regression Coefficient Test (t-test)

Table 4.6 Partial (t)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,827	.368		-4,971	.000
	ACHANGE	3,118	.601	.410	5,185	.001
	BDOUT	.048	.079	.044	.612	.042
	AUDITOR'S OPINION	2,438	.250	.771	9,749	.000
	CHANGE IN DIRECTORS	.083	.141	.042	.589	.004
	CEO'S PICTURES	.093	.206	.033	.452	.653

a. Dependent Variable: M-Score

Source: Data processed, 2020

Financial stability can be used to detect financial statement fraud.

Based on hypothesis testing, it shows that financial stability has a significant positive relationship to financial statement fraud, so the hypothesis is accepted. Based on the test results, it can be concluded that financial stability, which is proxied by the ratio of changes, can be used to detect the risk of financial statement fraud.

If a company has decreased assets from year to year compared to companies in other similar industries, investors, creditors and other stakeholders will be disinterested, because the company's condition is considered unstable (Kurnia and Anis, 2017). High pressure can cause a decrease in the performance of management, so that management will cover the company's unstable financial condition by manipulating the value of changes in total assets (ACHANGE), so that the company's financial performance looks stable. The higher the ACHANGE value, the higher the risk of fraud on financial statements.

The results of this study are in line with research from Bawekes et al. (2018) and Siddiq et al. (2017) which states that financial stability has an influence on financial statement fraud.

Ineffective monitoring can be used to detect financial statement fraud.

Based on the hypothesis testing, it shows that ineffective monitoring has an insignificant positive relationship with financial statement fraud, so the hypothesis is accepted. Based on the test results, it can be concluded that ineffective monitoring, which is proxied by the ratio of change, can be used to detect the risk of financial statement fraud.

The dominance of management by one person or small group, without compensation control, ineffective supervision of the board of directors and audit committee over the financial reporting process and internal control and the like can lead to ineffective supervision (SAS No. 99). To prevent fraud, another party is needed, namely an independent board of commissioners (Martantya and Daljono, 2013). The entry of the board of commissioners from outside the company will increase the effectiveness of the board of directors in supervising management to prevent fraudulent financial statements. However, this will not work if there is intervention to the independent board of commissioners or when the independent commissioner does not know the ins and outs of the company so that it will create loopholes in the company to commit fraud.

The results of this study support the research of Rukmana (2018), Agustina and Pratomo (2019), as well as Septriani and Handayani (2018) in their research stated that opportunities proxied by effective monitoring have a positive effect on financial statement fraud.

Auditor's opinion can be used to detect financial statement fraud.

Based on hypothesis testing, it shows that the auditor's opinion has a significant positive relationship to financial statement fraud, so the hypothesis is accepted. Based on the test results, it can be concluded that the auditor's opinion, which is proxied by the ratio of change, can be used to detect the risk of financial statement fraud.

The auditor's opinion is one of the things that investors consider before deciding to invest in a company. The auditor's opinion is used as an indicator to determine whether a company's financial performance is good or not. External auditors need to identify and consider risk factors that cause their audit clients to commit fraudulent acts (Sukirman and Sari, 2013). Auditors can provide several opinions related to the annual financial statements of the companies they have audited, one of which is unqualified with explanatory sentences. Unqualified opinion in explanatory language is one form of rationalization or justification of an auditor's findings during the audit process by writing them in an explanatory paragraph. This explanatory paragraph can be in the form of confirmation of various policy changes that have resulted in a restatement of financial statements or a reclassification of various accounts. Management will also feel right about the actions it has taken, including actions that risk causing fraudulent financial statements. Therefore the higher the auditor's opinion stating that the audit results are unqualified in explanatory language, the higher the risk of fraud in the company.

The results of this study support the research conducted by Ulfah et al. (2017), Afriyadi and Indah (2017), and Sarpta (2018) which state that the auditor's opinion has a significant positive effect on financial statement fraud.

Change in director can be used to detect financial statement fraud.

Based on hypothesis testing, it shows that change in directors have a positive and insignificant relationship with financial statement fraud, so the hypothesis is accepted. Based on the test results, it can be concluded that change in directors, which is proxied by the ratio of change, can be used to detect the risk of financial statement fraud.

Wolfe and Hermanson (2004) state that a change of directors can be an attempt by a company to improve the performance of its previous directors. By making these changes, it is assumed that the

new directors are considered to be more competent in their fields. This change of directors can also show certain political interests to replace the previous directors. However, changes in the board of directors are generally laden with political content and the interests of certain parties that trigger a conflict of interest. The change of directors can be indicated as an attempt to remove evidence of company fraud that may have been known to the previous directors. With this replacement of the board of directors, of course it will lead to a long adaptation so that the initial performance is not optimal.

The results of this study support the research of Ulfah et al. (2017) and Siddiq et al. (2018) stated that change in director had a positive but insignificant effect on financial statement fraud.

Frequent number of CEO's picture can be used to detect financial statement fraud.

Based on hypothesis testing, it shows that the frequent number of CEO's picture has no relationship with financial statement fraud, so the hypothesis is rejected. Based on the test results, it can be concluded that the frequent number of CEO's pictures, which is proxied by the ratio of change, cannot be used to detect the risk of financial statement fraud.

Tessa and Harto (2016) suggest that a CEO tends to show everyone the status and position he has in the company because they don't want to lose that status or position. In this study, arrogance is proxied by the total photos of the CEO displayed on a company's annual financial report. The more the number of CEO photos in the company's annual financial report, the more it will make a CEO feel that he has unmatched power. They feel that with their high position, the regulations and punishments that exist in the company do not apply to them, including committing fraud. That way, when the company experiences a decline in financial performance, the CEO can carry out earnings management freely because he feels he has the right to do so. However, the occurrence of fraudulent financial statements is not solely due to a selfish factor in a person. There is a need for factors other than these to support the occurrence of fraudulent financial statements.

The results of this study support the research of Ulfah et al. (2017) and Setiawati and Baningrum (2018) state that the frequent number of CEO's picture has no effect on financial statement fraud.

V. CONCLUSION, RECOMMENDATION AND LIMITATIONS OF THE RESEARCH

Conclusion

Based on the results of data analysis in the previous chapter, this research can be concluded as follows:

1. Based on the test results, it can be concluded that financial stability as proxied by ACHANGE can be used to detect financial statement fraud. With a decrease in asset value, of course, will cause agency problems, where management will be in a state of pressure because it has a performance that is far from the expectations of shareholders. Thus management manipulates financial reports in order to display stable financial reports as expected by shareholders.
2. Based on the test results, it can be concluded that ineffective monitoring can be used to detect financial statement fraud. The entry of the board of commissioners from outside the company will increase the effectiveness of the board of directors in supervising management to prevent fraudulent financial statements. However, this will not work if there is intervention to the independent board of commissioners or when the independent commissioner does not know the ins and outs of the company so that it will create loopholes in the company to commit fraud.
3. Based on the test results, it can be concluded that the auditor's opinion is unqualified with explanatory language which can be used to detect financial statement fraud. Unqualified opinion in explanatory language is one form of rationalization or justification of an auditor's findings during the audit process by writing them in an explanatory paragraph. This explanatory paragraph

can be in the form of confirmation of various policy changes that have resulted in a restatement of financial statements or a reclassification of various accounts.

4. Based on the test results, it can be concluded that change in directors can be used to detect financial statement fraud. Changes in the board of directors can be a way for company management to cover up fraud that has been committed by previous directors. With the change of company directors, it will take time to adapt to the company's financial statements.
5. Based on the test results, it can be concluded that the frequent number of CEO's picture cannot be used to detect financial statement fraud. This is based on the fact that of all the companies that were sampled, not many companies displayed a large number of CEO photos on the company's annual report, so the number of CEO photos on display could not be used as a factor in an indication of financial statement fraud. The occurrence of fraudulent financial statements is not solely due to selfish factors in a person. There is a need for factors other than these to support the occurrence of fraudulent financial statements.

Suggestion

After conducting this research, several suggestions were obtained as follows:

1. For the company
Companies that have been listed on the Indonesia Stock Exchange are expected to increase caution in providing information to the public so as not to mislead users of financial statements.
2. Shareholders
Shareholder It is advisable to be more careful in determining the options for investing. This is to anticipate fraud committed by the company or can use detection methods such as those used by researchers to detect indications of fraudulent financial statements.

Research limitations

1. Each variable uses only one proxy as research material.
2. This study only uses one sector, namely the consumer goods industry which is listed on the Indonesia Stock Exchange.
3. This study only uses data for 5 years, from 2014 to 2018.



REFERENCE

- Agustina, Ratna Dewi dan Dudi Pratomo. 2019. Pengaruh Fraud Pentagon dalam Mendeteksi Kecurangan Pelaporan Keuangan (Studi Empiris pada Perusahaan Sektor Pertambangan yang Terdaftar di Bursa Efek Indonesia Periode 2013-2017). Bandung: Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA), 3 (1), 44-62.
- Akbar, Taufiq. 2017. The Determination of Fraudulent Financial Reporting Causes by Using Pentagon Theory on Manufacturing Companies in Indonesia: International Journal of Business, Economic, and Law, Vol. 14.
- American Institute of Certified Public Accountant. 2002. Statement on Auditing Standards (SAS) No. 99: Consideration of Fraud in a Financial Statement Audit. New York: AICPA.
- Aprilia. 2017. Analisa Pengaruh Fraud Pentagon terhadap Kecurangan Laporan Keuangan Menggunakan Beneish Model pada Perusahaan yang Menerapkan Asean Corporate Governance Scorecard. Jurnal Aset (Akuntansi Riset), 9 (1), 101-132.
- Association of Certified Fraud Examiners Indonesia Chapter. 2017. Report to The Nations: Survei Fraud Indonesia 2016. Jakarta: ACFE Indonesia Chapter. www.acfe-indonesia.or.id
- Bawekes, Helda F et al. 2018. Pengujian Teori Fraud Pentagon Terhadap Fraudulent Financial Reporting (Studi Empiris pada Perusahaan yang Terdaftar di Bursa Efek Indonesia Tahun 2011-2015. Papua: Jurnal Akuntansi & Keuangan Daerah Volume 13, Nomor 1.
- Beneish, M. D. 1999. The Detection of Earnings Manipulation: Financial Analysts Journal.
- Brennan, Niamh M. and McGrath, Mary. (2007). Financial Statement Fraud: Incidents, Methods and Motives. Australia: Australian Accounting Review.
- Cressey, D. (1953). Other people's money: A study in the social psychology of embezzlement. California: Wadsworth.
- Dumaria, Nova dan Dr. Majidah., SE., M.Si. 2019. Pengaruh Fraud Pentagon Terhadap Deteksi Fraudulent Financial Reporting dengan Menggunakan Metode Beneish M-Score Model (Studi Empiris pada Perusahaan Pertambangan yang Terdaftar di Bursa Efek Indonesia pada tahun 2014-2017. Bandung: E-Proceeding of Management : Vol. 6, No. 2.
- Eisenhardt, Kathleen M. 1989. Agency Theory: An Assessment and Review. Academy of management Review.
- Fimanaya, F. & Syafrudin, M. 2014. Analisis Faktor-faktor yang Mempengaruhi Kecurangan Laporan Keuangan. Diponegoro Journal of Accounting, 3, 3, 1-11.
- Ghozali, Imam. 2011. Aplikasi Analisis Multivariate dengan Program IBM SPSS 19 (edisi kelima.) Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, Imam. 2013. Analisis Multivariate dengan Program IBM SPSS 21. Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, Imam. 2016. Aplikasi Analisis Multivariate Dengan Program IBM SPSS 23. Semarang: Badan Penerbit Universitas Diponegoro.
- Hanifa, Septia Ismah dan Laksito, Herry. 2015. Pengaruh Fraud Indicator Terhadap Fraudulent Financial Statement: Studi Empiris pada Perusahaan yang Listed di Bursa Efek Indonesia (BEI) Tahun 2008-2013. Diponegoro Journal of Accounting, Vol. 04, No. 04.
- Hermason, Dana R dan David T Wolfe. 2004. *The Fraud Diamond: Considering the Four Elements of Fraud*. New York: The CPA Journal, 38-425. Retrieved from New York State Society of CPAs.
- Hidayat, Taufik, dan Nina Istiadah. 2011. Panduan Lengkap Menguasai SPSS 19 untuk Mengolah data statistika Penelitian. Jakarta: Mediakita.
- Horwarth, Crowe. 2011. The Mind Behind The Fraudsters Crime: Key Behavioral and Environmental Element. USA: Crowe Horwarth International.

- Ikatan Akuntan Indonesia. 2015 Standar Akuntansi Keuangan. Jakarta: Ikatan Akuntan Indonesia. www.iaiglobal.or.id
- Ismawati, Dwi. 2019. Analisis Fraud Pentagon pada Financial Statement Fraud Menggunakan Beneish M-Score dan F-Score. Bumiayu: Universitas Peradaban.
- Jansen, Michael C. and Meckling, William H. (1976). Theory of the Firm: Managerial Behavior, Agency Cost and Ownership Structure. *Journal of Financial Economics*. Vol 3, No 4, hal. 305-306.
- Kurnia, Aidil a. dan Anis, Idrianita. 2017. Analisis Fraud Pentagon dalam Mendeteksi Kecurangan Laporan Keuangan dengan Menggunakan Fraud Score Model. *SNA XX*, Jember.
- Martantya dan Daljono. (2013). Pendeteksian Kecurangan Laporan Keuangan Melalui Faktor Risiko Tekanan dan Peluang (Studi Kasus pada Perusahaan yang Mendapat Sanksi dari Bapepam Periode 2002-2006). *Diponegoro Journal of Accounting*. 2, 2. 1-12
- Nurmulina, A., & Sasongko, N. (2018). Analisis Fraud Pentagon Dalam Mendeteksi Financial Statement Fraud. Seminar Nasional dan The 5th Call For Syariah Paper 2018.
- Nursanita, et al. 2019. Pengaruh Kepemilikan Manajerial, Kepemilikan Institusional, Struktur Modal, Pertumbuhan Perusahaan, dan Profitabilitas terhadap Nilai Perusahaan pada Perusahaan Manufaktur di Indonesia tahun 2015-2018. Jakarta: *Jurnal STEI Ekonomi* Vol 28 No. 01.
- Priantara. 2013. *Fraud Auditing & Investigation*. Jakarta: Mitra Wacana Media.
- Ratna Wardhani. 2012. Faktor-faktor Penyebab dan Konsekuensi dari Kecurangan Pelaporan Keuangan (Fraud): Suatu Tinjauan Teoritis.
- Rezaee, Z. 2005. Causes, consequences, and deterrence of financial statement fraud: Critical Perspectives on Accounting 16: 277–298.
- Rukmana, Heru Satria. 2018. Pentagon Fraud Affect on Financial Statement Fraud and Firm Value Evidence in Indonesia: *South East Asia Journal of Contemporary Business, Economic, and Law* Vol 16.
- Septriani, Yosi dan Desi Handayani. 2018. Mendeteksi Kecurangan Laporan Keuangan dengan Analisis Fraud Pentagon. Padang: *Jurnal Akuntansi, Keuangan dan Bisnis* Vol. 11, No. 1.
- Setiawati, Erma dan Ratih Mar Baningrum. 2018. Deteksi Fraudulent Financial Reporting Menggunakan Analisis Fraud Pentagon: Studi Kasus Pada Perusahaan Manufaktur yang Listed di BEI Tahun 2014-2016. Surakarta: *Riset Akuntansi dan Keuangan Indonesia*.
- Shelton, Austin. 2014. Analysis of Capabilities Attributed to the Fraud Diamond: Undergraduate Honors These. Paper 21. <http://dc.etsu.edu/honors/213>
- Siddiq, Faiz Rahman et al. 2017. Fraud Pentagon dalam Mendeteksi Financial Statement Fraud. Surakarta: Seminar Nasional dan The 4th Call for Syariah Paper.
- Sihombing, Kennedy Samuel dan Shiddiq Nur Raharjo. (2014). Analisis Fraud Diamond dalam Mendeteksi Financial Statement Fraud: Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2010-2012: *Diponegoro Journal of Accounting* Vol. 03 No. 02. ISSN (Online): 23373806.
- Skousen, Christopher J et al. 2009. Detecting and Predecting Financial Statement Fraud: The Effectiveness of The Fraud Triangle and SAS No. 99. *Corporate Governance and Firm Performance Advances in Financial Economics*, 53-81.
- Sorunke, Olukayode Abayomi. 2016. Personal Ethic and Fraudster Motivation: The Missing Link in Fraud Triangle and Fraud Diamond Theories: *International Journal of Academic Research in Business and Social Sciences* Vol. 6 No. 2
- Sukirman dan Sari, Maylia Pramono. (2013). Model Deteksi Kecurangan Berbasis Fraud Triangel (Studi Kasus Pada Perusahaan Publik di Indonesia): *Jurnal Akuntansi dan Auditing*, Vol. 09, No. 02. Hal. 199-225.

- Tessa, Chyntia dan Puji Harto. Fraudulent Financial Reporting: Pengujian Teori Fraud Pentagon pada Sektor Keuangan dan Perbankan di Indonesia. Lampung: Simposium Nasional Akuntansi XIX.
- Ulfah, Maria et al. 2017. Pengaruh Fraud Pentagon dalam Mendeteksi Fraudulent Financial Reporting (Studi Empiris pada Perbankan di Indonesia yang Terdaftar di BEI). Madiun: The 9th FIPA: Forum Ilmiah Pendidikan Akuntansi – Universitas PGRI Madiun Vol. 5 No. 1.
- Wolfe, D. T., and D. R Hermanson. 2004. The Fraud Diamond : Considering the Four Elements of Fraud.” CPA Journal.
- Internet:
<https://www.msn.com/id-id/ekonomi/ekonomi/manipulasi-laporan-keuangan-dirut-pt-hanson-berujung-denda-rp-5-miliar/ar-AAFzfko>.Diakses tanggal 5 Januari 2020.
- Hartomo, Giri. 2019. Kronologi Kasus Laporan Keuangan Garuda Indonesia Hingga Kena Sanksi.<https://www.google.com/amp/s/economy.okezone.com/amp/2019/06/28/320/2072245/kronologi-kasus-laporan-keuangan-garuda-indonesia-hingga-kena-sanksi>.Diakses tanggal 5 Januari 2020.
- Detik Finance. 2011. Skandal Penipuan Korporasi Terbesar Jepang Oleh Olympus.<https://m.detik.com/finance/berita-ekonomi-bisnis/d-176310/skandal-penipuankorporasi-terbesar-jepang-oleh-olympus>. Diakses tanggal 5 Januari 2020.

