

## THE INFLUENCE OF FRAUD PENTAGON IN DETECTING FRAUDULENT FINANCIAL STATEMENTS (EMPIRICAL STUDY OF TRANSPORTATION AND LOGISTICS COMPANIES)

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### Abstract

*This study aims to examine the elements of the Fraud Pentagon proxied by five variables consisting of Pressure (External Pressure), Opportunity (Ineffective Monitoring), Rationalization (Change in Auditor), Ability (Change in Directors), and Arrogance (Frequent Number of CEO's Pictures) which are hypothesized to affect Financial Statement Fraud. The population in this study are Transportation & Logistics sector companies listed on the Indonesia Stock Exchange for the period 2020-2022. The sample in this study was selected using a purposive sampling technique and obtained a sample of 75 observation data. The analysis method in this study uses multiple linear regression which is processed using SPSS 25 software. The results showed that External Pressure affected Financial Statement Fraud. While Ineffective Monitoring, Change in Auditor, Change in Directors, and Frequent Number of CEO Pictures do not affect Financial Statement Fraud.*

**Keywords:** Financial Statement Fraud, Pentagon Fraud, Transportation and Logistic

### Introduction

Financial statements are the main parameter to inform company performance. The significant influence of financial reports is what makes the number of cases of fraud or manipulation in financial reports. In addition, financial reports are also a form of management accountability for the resources used that have been entrusted to them regarding the management of an entity (Raphelanda, 2022). This usually encourages companies to present perfect financial reports so that they can meet the needs or desires of their users, which in turn can lead to the risk of fraud.

The definition of fraud according to the Association of Certified Fraud Examiners (ACFE) is an unlawful act committed intentionally for a specific purpose, such as manipulation or providing false reports to other parties (individuals or agencies). Fraud in financial statements occurs due to motivation and encouragement from various parties, both from within the company and from outside the company.

The transportation sector is one of the important elements in the implementation of national development. Along with the development of the Indonesian transportation sector, the problems faced are increasingly diverse, such as the existence of policies from the government, namely the increase in fuel prices, UMR (Regional Minimum Wage), Basic Electricity Rates (TDL) and corporate taxes which cause the costs incurred by the company to increase (Suprobo et al., 2017). One of the cases of financial statement fraud in the transportation & logistics sector is a state-owned company in the air transportation sector, PT Garuda Indonesia (2019). Garuda Indonesia recorded a profit of USD809.85 thousand (exchange rate of IDR14,000 per US dollar), whereas in 2017, Garuda recorded a loss of USD216.5. In cooperation with PT Mahata Aero Teknologi, PT Mahata will guarantee all costs related to the provision, implementation, installation, and use of connection services on flights. Although PT Mahata has not yet made payments and the agreement between the two companies has not yet expired, PT Garuda Indonesia has recognized revenue of USD239.34 million, even though the agreement has a validity period of 15 years. For this case, the finance ministry then sanctioned the public accounting firm Kasner Sirumpea for auditing Garuda Indonesia's 2018 annual financial statements (Nurbaiti & Putri, 2023).

Financial Statement Fraud is a problem that cannot be underestimated. From year to year, there are always cases of fraud. The fraud that occurs needs to know the cause so that it can be detected so it can prevent fraud in the future. Detection is an important concept in fraud investigation because the speed of fraud detection and how to detect it can have a significant impact on the size of the fraud. This research is a study that applies Crowe's fraud pentagon theory. This is done because the theory is a renewable theory that has rarely been applied to examine financial reporting fraud, especially in Indonesia, and the fraud indicators presented in Crowe's fraud pentagon theory are much more complete than similar theories such as the fraud triangle and fraud diamond theories.

## **Literature Review**

### **Agency Theory**

Jensen & Meckling (1976) in his research states that agency theory is a contract involving one or more people, in this case, the principal hires another person (agent) to provide a service and delegate to the agent the authority to make the right and best decisions for the principal.

The relationship between agency theory and pentagon fraud factors in detecting financial statement fraud is that agency theory explains how management or agents maintain the trust of investors or principals. Providing the best results to investors is a big pressure that is often felt by management as an agent, therefore management often makes various efforts to maintain investor confidence in the company, including by committing fraud or manipulating financial statements so that the company will look in good condition.

### **Attribution Theory**

Attribution theory studies the process of how a person interprets events, reasons, or causes of their behavior. According to (Pasaribu & Wijaya, 2017) attribution theory is a theoretical model that explains the attitude of oneself and others occurs because of internal and/or external factors that influence. This theory tries to explain that someone does something because there is an influence from internal and/or external factors. Attribution theory explains how people infer the causes of behavior by themselves or others. It explains the processes that occur within us so that we understand our own and other people's behavior.

### **Fraud in the Financial Statements**

Fraud is a deliberate act that causes harm to certain parties. Fraud in financial statements is intentional or negligent in financial reporting where the financial statements presented are not in accordance with applicable accounting standards and the actual financial condition of the company. This negligence or intentionality is material so it can affect the decisions that will be made by interested parties (Sihombing & Rahardjo, 2014).

### **Fraud Pentagon**

Crowe's fraud pentagon or also known as the fraud pentagon theory is the development of the fraud triangle theory previously proposed by (Cressey, 1953), and the fraud diamond theory previously proposed by (Wolfe & Hermanson, 2004), in this theory adding one other fraud element, namely arrogance.

The results of research conducted by Donald Cressey found that pressure (pressure), the opportunity or opportunity to commit fraud (opportunity), and the pretext to justify fraud (rationalization) are three common characteristics that will exist when fraud occurs which are the cause of someone committing fraud. The fraud triangle is a theory that helps a lot to identify fraud, but several situations cannot be identified by the fraud triangle. Therefore, Crowe expanded and developed the fraud model into five elements, namely pressure, opportunity, rationalization, competence, and arrogance, then this theory is called the fraud pentagon theory.

### **Pressure**

Pressure is one of the elements or factors that become an impetus for entities to manipulate financial statements that arise when there is a decrease or instability in the entity's financial prospects, caused by economic conditions, industry, or entity operations (Hery, 2016). The pressure factor in this study is proxied by external pressure which is calculated by the leverage ratio.

### **Opportunity**

According to (Nurbaiti & Hanafi, 2017) opportunity is a condition that provides the possibility for someone to act or occupy a place in a certain position. Opportunities or opportunities can occur due to weak internal controls in the company or poor management supervision. Therefore, companies must increase management supervision and improve internal control in the company to minimize fraud within the scope of the company. The opportunity factor in this study is proxied using ineffective monitoring.

### **Rationalization**

According to (Siddiq & Hadinata, 2016) rationalization is the existence of an attitude, character, or set of ethical values that allow certain parties to commit fraud or people who are in a stressful enough environment that makes them rationalize fraud. This study proxies rationalization with a change of KAP ( $\Delta$ KAP) which is measured using a dummy variable.

### **Competence**

(Wolfe & Hermanson, 2004) argue that fraud will not occur without the right ability to commit fraud in detail so that it is not easy to detect. Weak supervision provides an opportunity for someone to commit fraud and someone will rationalize the action. In this study, the ability is proxied by director turnover (DCHANGE) which is measured by a dummy variable.

## Arrogance

Arrogance is a lack of conscience as an attitude of superiority or arrogance in someone who believes that internal control cannot be applied personally (Aprilia, 2017). Arrogance can trigger fraudulent financial statements by abusing the authority and power possessed by an organization or company. In this study, arrogance is proxied by a Frequent number of CEO's pictures.

## Methods

### Type and Source of Data

This research is quantitative. Quantitative research is a research method based on the positive nature of, which is used to examine a certain population or sample, where data collection uses research instruments and data analysis is statistical with the aim of testing predetermined hypotheses. The research was conducted to determine the effect of the fraud Pentagon on financial statement fraud in transportation & logistics companies listed on the IDX for the 2020-2022 period.

The data collected in the study is secondary data. The secondary data source used in this study is in the form of financial reports listed on the Indonesia Stock Exchange for the period 2020-2022. Sampling was carried out based on the purposive sampling method, which obtained a research sample of 25 companies with 75 observations for 3 years.

### Data Analysis Method

The data analysis method is a series of activities for analyzing, classifying, systematizing, interpreting, and verifying data so that a phenomenon has social, academic, and scientific value (Zelin, 2018).

The data analysis method used in this study is multiple linear regression. In this study, the multiple linear regression model was tested using SPSS 25 for Windows software. For each hypothesis, this study uses the F-Score model to measure fraud against financial statements. The research model is formulated as in the research (Kurnia & Anis, 2017):

$$F\text{-SCORE} = \beta_0 + \beta_1\text{LEV} + \beta_2\text{BDOUT} + \beta_3\Delta\text{CPA} +$$

F-Score	=	Financial statement fraud
$\beta_0$	=	Constant
$\beta_1, 2, 3,$	=	Variable coefficient
LEV	=	Leverage ratio
BDOUT	=	Independent Board of commissioners ratio
$\Delta\text{CPA}$	=	Change in auditors
DCHANGE	=	Change in directors
CEOPIC	=	Number of CEO photos in annual report
$\varepsilon$	=	Error

## Result and Discussion

### Descriptive Statistical Analysis

Based on the tests that have been carried out, the Descriptive Statistical Test Results of 75 company data for the Transportation & Logistics sector in 2020-2022 can be interpreted as follows:

1. The results for descriptive statistical analysis of the dependent variable, namely financial statement fraud as measured by F-Score, show an average value of 0.37574, which indicates that the average transportation & logistics company during the 2020-2022 period has a level of financial statement fraud of 37.6%. The standard deviation of this study is 0.532534. This shows that the level of risk of fraud in the transportation & logistics sector is high. Based on Table 2, it can be seen that the results of descriptive statistical analysis for F-Score show the lowest value is -1.037 while the highest value is 1.452.
2. For the independent variable pressure (pressure) proxied by external pressure, it shows a minimum value of 0.001 and a maximum value of 1.246 with a standard deviation of 0.315940, indicating that during the 3-year research period with 75 samples, the average external pressure was 0.48105. This figure shows that the level of the company's ability to pay debt is 48.1%.
3. In the opportunity variable (opportunity) proxied by ineffective monitoring, namely by calculating the ratio of the number of independent commissioners to the total board of commissioners, it shows that the lowest value is 0.250 and the highest value is 0.667 and has a standard deviation of 0.114008. The overall average ratio of the independent board of commissioners is 0.45731. This means that the transportation & logistics sector company in 2020-2022 has a turnover rate of the independent board of commissioners of 45.7%.
4. The third variable, namely rationalization, is proxied by auditor switching (change in auditor) in this study and is measured by a dummy variable ( $\Delta\text{CPA}$ ). The results of the study during 2020-2022 with 75 samples resulted in an average of 0.25, meaning that 25% of the sample companies changed public accounting firms (score 1) while the remaining 75% of the companies did not change public accounting

firms (score 0). In this variable, the standard deviation is 0.438 and then there is a minimum value of 0.00 and a maximum value of 1.00.

5. The capability variable in this study is proxied by a change in directors, which in this study uses DIR\_CHANGE, which examines the change of directors in the company. Based on the research, the average value is 0.25, meaning that 25% of the sample companies have a change of directors (value 1) and the remaining 75% of the companies do not have a change of directors (value 0). The standard deviation value on the variable change of directors is 0.438. The minimum value in this study is 0.00 and the maximum value is 1.00.
6. In the last variable, namely arrogance, which is proxied by the frequent number of CEO's pictures, shows the results of descriptive analysis, namely the lowest value of 2.00 and the highest value of 9.00 with a standard deviation of 1.923. The average value obtained is 5.61.

#### **Normality Test**

From the results of the Kolmogorov-Smirnov test through the Monte Carlo approach, the Monte Carlo Sig. (2-tailed) value of 0.360. These results can be concluded that the residual data in this regression model is normally distributed because the Monte Carlo Sig. (2-tailed) above the 5% or 0.05 confidence level and the regression model is suitable for further analysis.

#### **Multicollinearity Test**

From the research results, it can be concluded that all independent variables show a tolerance value  $> 0.10$  and a VIF value  $< 10$ . Thus it can be stated that the independent variables used in the regression model of this study are free from multicollinearity, reliable, and objective.

#### **Autocorrelation Test**

Based on the test results, the Durbin-Watson value in this study is 1.983. Comparison using a significance value of 5%, a sample size of 75 (n), and the number of independent variables 5 ( $k = 5$ ), the Durbin-Watson table will get a du value of 1.76. Because the DW value of 1.983 is greater than the upper limit (du) of 1.76 and less than  $4 - 1.76$  (2.24), it can be concluded that there is no autocorrelation.

#### **Heteroscedasticity Test**

The results of heteroscedasticity testing in the study show that the significance value for all variables is more than 0.05 and in the Scatterplot graph the points spread above and below the number 0 on the absolute residual axis Y. This means that it can be concluded that the data does not occur heteroscedasticity either through the Glejser Test method or through the Scatterplot in the regression model.

#### **F Statistical Test**

From the results of the F statistical test, the significance value is 0.000. Since the significance value in this study is per the basis for decision-making in the F test, namely  $0.000 < 0.05$ , it can be concluded that the regression value is fit.

#### **t Statistical Test**

In this study, the results of regression analysis show that only the external pressure variable (LEV) shows a significant relationship to the dependent variable with a value of 0.000 (sig.  $< 0.05$ ). Meanwhile, the variables of supervisory ineffectiveness (BDOU), auditor turnover ( $\Delta$ CPA), change of directors (DCHANGE), and the number of photos displayed (CEOPIC) show an insignificant relationship and have a significance probability value  $> 0.05$  with each variable having a significance probability value of 0.078 (BDOU); 0.239 ( $\Delta$ CPA); 0.916 (DCHANGE); 0.937 (CEOPIC).

#### **Test Coefficient of Determination (R<sup>2</sup>)**

From this study, the Adjusted R<sup>2</sup> value is 0.491 or 49.1%. These results indicate that the dependent variable on fraud on financial statements proxied by F-score can be explained by the independent variable, namely the fraud pentagon which is proxied by external pressure, ineffective supervision, auditor turnover, change of directors, and the number of CEO photos displayed by 49.1%.

### **Discussions**

#### **The Effect of External Pressure on Financial Statement Fraud**

Based on hypothesis testing of the effect of External Pressure on Financial Statement Fraud, the results show that the pressure variable proxied by External Pressure has a significant and positive effect on Financial Statement Fraud. In this variable, the test is carried out by testing the significance of the regression coefficient of external pressure (LEVERAGE). Based on the research results external pressure has a positive regression coefficient of 1.146 and sig. t. of 0.000. The regression coefficient of this hypothesis has a straight or unidirectional direction and has a sig. t  $< 0.05$ . This means that External Pressure has a significant effect on

Financial Statement Fraud, so the hypothesis is supported. It can be concluded that the size of the External Pressure value will affect the potential for Financial Statement Fraud.

In this study, Leverage was shown to have a significant effect on fraudulent financial statements. This is because the company is unable to pay or return its debts. After all, there is a value of total liabilities that is higher than total assets so the company cannot finance its obligations. So it can be concluded that Leverage can be a pressure for managers to commit fraudulent acts in making and presenting information in the company's annual financial statements.

#### **The Effect of Ineffective Monitoring on Financial Statement Fraud**

In this study, testing the hypothesis of the effect of Opportunity on Financial Statement Fraud shows the result that the Opportunity variable proxied by Ineffective Monitoring has no significant effect on Financial Statement Fraud. In this variable, the test is carried out by testing the significance of the regression coefficient of ineffective supervision (BDOUT). Based on research ineffective supervision has a positive regression coefficient of 0.702 and a sig. t. level of 0.078. The regression coefficient has a positive direction and sig level.  $t. > 0,05$ . This means that ineffective supervision has a positive and insignificant effect on financial statement fraud, so hypothesis 2 is not supported. It can be concluded that the size of the value of the ineffectiveness of supervision will not affect the potential for fraudulent financial statements.

The small number of independent commissioners in the transportation & logistics sector companies listed on the IDX for the 2020-2022 period does not influence the level of corporate financial statement fraud. This is because there is still an internal board of commissioners who supervise and the existence of an internal control system which has even been regulated by the government in circular No.05 / 22 / DPNP so that the ineffectiveness of supervision in the transportation & logistics sector is not only determined by the number of independent commissioners. Therefore, the ineffectiveness of supervision proxied by the ratio of the number of independent commissioners does not make an opportunity for transportation & logistics sector companies listed on the IDX to commit financial statement fraud.

#### **Effect of Change in Auditor on Financial Statement Fraud**

The test results state that auditor turnover (change in auditor) hurts financial statement fraud. In this variable, the test is carried out by testing the regression significance of the auditor turnover variable ( $\Delta CPA$ ). Based on the results of the study, it shows that the auditor turnover regression coefficient is -0.122 with sig. t. of 0.239. The regression coefficient has the opposite direction to the hypothesis with a sig. t. level of 0.239.  $> 0,05$ . This means that auditor turnover has no significant effect on financial statement fraud, so hypothesis 3 is not supported. From these results, it can be concluded that the greater or smaller the value of auditor turnover, it will not affect the potential for fraudulent financial statements.

Changing auditors for transportation & logistics sector companies listed on the IDX for the 2020-2022 period is not a justification for companies to commit fraud. From the data obtained on the IDX, it shows that in the 3 years, only a few companies in the transportation & logistics sector experienced auditor changes. The change of auditors can be caused by the time limit of the audit period for external auditors this is stated in the Financial Services Authority Regulation Number 13 / PJOK.03 / 2017 concerning the use of Public Accountant Services and Public Accounting Firms in Financial Services Activities article 16 paragraph (1) where restrictions on audit services by the same AP are only for 3 consecutive years.

#### **The Effect of Change in Directors on Financial Statement Fraud**

In this study, testing the hypothesis of the effect of Ability on Financial Statement Fraud shows the result that the Ability variable proxied by Change in Directors does not have a significant effect on Financial Statement Fraud. In this variable, the test is carried out by testing the regression significance of the variable change of directors (DCHANGE). In this study, the change of directors has a negative regression coefficient of -0.011 with a sig. t. level of 0.916. The regression coefficient has a negative direction that does not follow the hypothesis and the sig level.  $t. > 0,05$ . This means that the change of directors does not affect financial statement fraud, so hypothesis 4 is not supported. From the results of this study it can be concluded that the greater or smaller the value of the change of directors, it will not affect the potential for fraudulent financial statements. The negative results indicate that the change of directors that occurred was not utilized by management to commit fraudulent acts.

In this study, the change of directors of transportation & logistics sector companies listed on the IDX for the period 2020-2022 experienced only a few changes in a period of 3 years. This means that the change of directors in the transportation & logistics sector company does not indicate the ability of the board of directors to commit fraud, but the change of directors is carried out to improve company performance.

#### **The Effect of Frequent Number of CEO's Pictures on Financial Statement Fraud**

Based on hypothesis testing of the effect of Arrogance on Financial Statement Fraud, the results show that the Arrogance variable proxied by Frequent Number of CEO's Pictures does not influence Financial Statement Fraud. In this variable, the test is carried out by testing the regression significance of the variable number of CEO photos displayed (CEOPIC). The results of this study show that the number of CEO photos

displayed has a negative regression coefficient of -0.002 so it has the opposite direction with a sig. t. value of  $0.937 > 0.05$ . This means that the number of plastered CEO photos has no significant effect on financial statement fraud, so hypothesis 5 is not supported. From the results of this study it can be concluded that the greater or smaller the value of the number of plastered CEO photos, it will not affect the potential for fraudulent financial statements.

The inclusion of the CEO's picture displayed in the company's annual report on the transportation & logistics sector companies listed on the IDX for the 2020-2022 period cannot show the arrogant nature of a CEO. This is because the CEO's picture displayed in the company's annual report is a form of transparency as to who is responsible for the company's activities and as a form of participation and leadership responsibility for every activity carried out by the company.

### **Conclusion**

This study aims to prove empirically the effect of Pressure (External Pressure), Opportunity (Ineffective Supervision), Rationalization (Auditor Change), Capability (Change of Directors), and Arrogance (Number of Displayed Photos) on financial statement fraud in transportation & logistics sector companies listed on the Indonesia Stock Exchange for the period 2020-2022. Based on the test results conducted, the following conclusions can be drawn:

1. External pressure (external pressure) has a positive effect on financial statement fraud.
2. Ineffective monitoring does not affect fraudulent financial statements.
3. Change of auditor (change in auditor) does not affect fraudulent financial statements.
4. Change in directors (change in directors) does not affect fraudulent financial statements.
5. The number of CEO photos displayed (frequent number of CEO pictures) does not affect fraudulent financial statements.

### **Suggestions**

Based on the results of data analysis and hypothesis testing that has been carried out, the researchers provide several suggestions, among others:

1. For the company, companies are advised to be more transparent in providing information about financial reports to stakeholders so that stakeholders do not feel cheated by the company. In addition, fraud in the presentation of financial statements is not only detrimental to stakeholders but will also be detrimental to the company. Therefore, companies are expected not to commit fraud for the sake of the company's operational sustainability.
2. For stakeholders, stakeholders are advised to be more careful in determining investment decisions in a company. It's a good idea for stakeholders to first detect financial statement fraud in companies that are planned as a place to invest as done by researchers or other researchers.
3. For the next researcher, suggestions for future researchers include: further research is suggested to expand the research population by considering the use of all companies listed on the Indonesia Stock Exchange so that the research sample is larger and provides better results, further research is recommended to extend the research period so that the results of the study are able to produce better values and observations, further research is recommended to use different measurements related to the dependent variable of financial statement fraud so that the results are better and further research is suggested to add proxy variables of pentagon fraud such as financial targets where managers have pressure that the company must achieve predetermined targets with that managers can commit fraud to meet predetermined targets, financial stability where managers have more expectations from investors or creditors so that it becomes the pressure for managers, which if able to explain the influence on financial statement fraud is stronger.

### **Limitations and further research**

Researchers realize that there are still many shortcomings in this study. This is due to the limitations of researchers in conducting research. Some of these limitations include:

1. The data used in this research is secondary data, so research cannot control and supervise the possibility of errors in calculations.
2. There are some data from annual reports from both the official website of the Indonesia Stock Exchange and the company's official website that cannot be accessed and many companies do not present complete financial reports so several companies fail to select samples, resulting in researchers not being able to see all companies that commit fraud in the transportation & logistics sector financial statements for the 2020-2022 period.
3. The sample in this study only centered on transportation & logistics sector companies listed on the Indonesia Stock Exchange for the period 2020-2022 with a total sample of 75 out of 25 companies.

### **References**

- Agustina, R. D., & Pratomo, D. (2019). Pengaruh Fraud Pentagon dalam Mendeteksi Kecurangan Pelaporan Keuangan. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 3(1), 44–62.

- American Institute of Certified Public Accountants. (2002). Statement on Auditing Standards (SAS) No. 99: Consideration of Fraud in a Financial Statement Audit.
- Annisya, M., & Asmaranti, Y. (2016). Pendeteksian Kecurangan Laporan Keuangan Menggunakan Fraud Diamond. *Jurnal Bisnis Dan Ekonomi (JBE)*, 23(1), 72–89.
- 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 (ACFE). (2020). Report To the Nations 2020 Global Study on Occupational Fraud and Abuse.
- Association of Certified Fraud Examining (ACFE). (2014). Report to the nation on occupational fraud and abuse.
- Cressey, D. R. (1953). *Other People's Money: A Study in the Social Psychology of Embezzlement*. Free Press, Glencoe, Ill.
- Dama Yanti, D., & Munari. (2021). Analisis Fraud Pentagon Terhadap Kecurangan Laporan Keuangan Pada Sektor Perusahaan Manufaktur. 17, 31–46.
- Elviani, D., Ali, S., & Kurniawan, R. (2020). Pengaruh Kecurangan Laporan Keuangan terhadap Nilai Perusahaan: Ditinjau dari Perspektif Fraud Pentagon (Kasus di Indonesia). *Jurnal Ilmiah Universitas Batanghari Jambi*, 20(1), 121.
- Faradiza, S. A. (2019). Fraud Pentagon dan Kecurangan Laporan Keuangan. *EkBis: Jurnal Ekonomi Dan Bisnis*, 2(1), 1–22.
- Fitri, F. A., Syukur, M., & Justisa, G. (2019). Do The Fraud Triangle Components Motivate Fraud In Indonesia? *Australasian Accounting, Business and Finance Journal*, 13(4), 63–72.
- Ghozali. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25 (9th ed.)*. Badan Penerbit Universitas Diponegoro.
- Hastuti, P. M. D., Rahayu, S., & Pratiwi, E. C. (2023). Fraud Pentagon Theory Terhadap Kecurangan Laporan Keuangan di Sektor Perusahaan Manufaktur. *Jurnal Ekobistek*, 12(2), 614–621.
- Herviana, E. (2017). *Fraudulent Financial Reporting: Pengujian Teori Fraud Pentagon pada Badan Usaha Milik Negara (BUMN) yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2012-2016*. Universitas Islam Negeri (UIN) Syarif Hidayatullah Jakarta.
- Hery. (2016). *Analisis Laporan Keuangan*. PT. Gramedia Widiasarana Indonesia.
- Horwath, C. (2011). *Putting The Freud in Fraud: Why the Fraud Triangle is No Longer Enough*, IN Horwath, Crowe.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Joseph, W. (2011). *Fraud Handbook Prevention and Detection Third Edition*. In New York: John Wiley & Sons, Inc. . John Wiley & Sons, Inc. .
- Kurnia, A. A., & Anis, I. (2017). Analisis Fraud Pentagon dalam Mendeteksi Kecurangan Laporan Keuangan dengan Menggunakan Fraud Score Model. *Journal of Simposium Nasional Akuntansi XX*.
- Kuswantoro, A. (2014). *Pendidikan administrasi perkantoran berbasis teknologi informasi komputer*. Salemba Empat.
- Manao, H. (2006, August). *Audit Laporan Keuangan PT KAI Masih Diperdebatkan*. Liputan 6.
- Mangitung, M. P. (2023). Analisis Fraud Pentagon dalam Mendeteksi Kecurangan Laporan Keuangan pada Perusahaan Manufaktur yang Terdaftar di BEI Tahun 2018-2020. Universitas Hasanuddin.
- Nurbaiti, A., & Putri, A. A. (2023). Mendeteksi Kecurangan Laporan Keuangan Menggunakan Teori Fraud Hexagon. *Jurnal Studi Akuntansi Dan Keuangan*, 6(1), 215–228.
- Nurbaiti, Z., & Hanafi, R. (2017). Analisis Pengaruh Fraud Diamond Dalam Mendeteksi Tingkat Accounting Irregularities. *Jurnal Akuntansi Indonesia*, 6(2), 167–184.
- Nuridah, S., Sitohang, R. M., Supraptiningsih, J. D., Sagitarius, E., & Septiani, A. (2023). Pengaruh Fraud Hexagon Model Terhadap Kecurangan Laporan Keuangan Perusahaan Transportasi Dan Logistik. *Jurnal Ilmu Sosial Dan Pendidikan (JISIP)*, 7(3), 2598–9944.
- Pasaribu, E. M., & Wijaya, S. Y. (2017). Implementasi Teori Atribusi untuk Menilai Perilaku Kecurangan Akuntansi. 4(1), 41–66.
- Pulukadang, R., Naholo, S., & Pongoliu, Y. I. (2014). Pengaruh Fraud Triangle untuk Mendeteksi Tindak Kecurangan Laporan Keuangan pada Perusahaan Property dan Real Estate di Bursa Efek Indonesia Periode 2010-2012. Universitas Negeri Gorontalo.
- Putra, A. R., & Kusnoegroho, Y. A. (2021). Pengujian Fraud Pentagon dalam Mendeteksi Kecurangan Laporan Keuangan. *AFRE (Accounting and Financial Review)*, 4(2), 172–185.
- Putra, I. R. (2016). *Jadi tersangka kasus korupsi, dirut PT Pos Indonesia dipecat*. Merdeka.Com.
- Raphelanda, N. D. (2022). Analisis Pengaruh Fraud Hexagon Dalam Mendeteksi Financial Statement Fraud (Studi Empiris pada Perusahaan Sektor Kesehatan, Sektor Keuangan, Sektor Teknologi, Sektor Properti & Real Estate, dan Sektor Transportasi & Logistik yang Terdaftar di Bursa Efek Indonesia Tahun 2019-2020).
- Richardson, S. A., Sloan, R. G., Soliman, M. T., & Tuna, I. (2005). Accrual reliability, earnings persistence

- and stock prices. *Journal of Accounting and Economics*, 39(3), 437–485.
- Rusmana, O., & Tanjung, H. (2019). Identifikasi Kecurangan Laporan Keuangan dengan Fraud Pentagon Studi Empiris BUMN Terdaftar di Bursa Efek Indonesia. *Jurnal Ekonomi, Bisnis Dan Akuntansi (JEBA)*, 21(4).
- Septriani, Y., & Handayani, D. (2018). Mendeteksi Kecurangan Laporan Keuangan dengan Analisis Fraud Pentagon. *Jurnal Akuntansi, Keuangan Dan Bisnis*, 11(1), 11–23.
- Siddiq, F. R., & Hadinata, S. (2016). Fraud Diamond Dalam Financial Statement Fraud. *Jurnal Bisnis Dan Manajemen Islam*, 4(2).
- Sihombing, K. S., & Rahardjo, S. N. (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*, 3(2), 2337–3806.
- Skousen, C. J. (2009). Detecting and Predicting Financial Stability: The Effectiveness of the Fraud Triangle and SAS N0. 99. *Journal of Accounting and Auditing*, 13, 53–81.
- Supriadi, Y. (2017, February 1). Mantan Direksi PT Pos Didakwa Korupsi. *PikiranRakyat.Com*.
- Suprobo, M. D., Mardani, R. M., & Wahono, B. (2017). Pengaruh Likuiditas Leverage dan Profitabilitas Terhadap Financial Distress Pada Perusahaan Transportasi yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2011-2015. 6(8).
- Tessa, C., & Harto, P. (2016). *Fraudulent Financial Reporting: Pengujian Teori Fraud Pentagon pada Sektor Keuangan dan Perbankan di Indonesia*. Doctoral Dissertation, Fakultas Ekonomika Dan Bisnis.
- Tuanakotta. (2010). *Akuntansi Forensik dan Audit Investigatif*. Lembaga Penerbit FE UI.
- Wolfe, D. T., & Hermanson, D. R. (2004). The Fraud Diamond: Considering the Four Elements of Fraud. *The CPA Journal*, 74(12), 38–42.
- Zelin, C. (2018). Analisis Fraud Pentagon dalam Mendeteksi Kecurangan Laporan Keuangan dengan Menggunakan Fraud Score Model. *Jurnal Ekonomi*.