

A Literature Review: Determinants of Potential Fraudulent Financial Statement with Pentagon Fraud Analysis in Manufacturing Companies

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ABSTRACT

This study aims to provide an overview of the development, focus, and methodology of the fraudulent financial statement literature. This study uses a literature review to determine studies with specified criteria. The type of data used in this research is secondary data with a time bracket of 2018-2022. From this study financial statement fraud has 3 theories of fraud, namely the fraud triangle theory where there are 3 factors, namely pressure, opportunity, and rationalization. The second theory of fraud is the fraud diamond theory where there are 4 factors, namely: pressure, opportunity, rationalization, and capability. Then the last theory is fraud pentagon theory which adds 1 factor so that it becomes pressure, opportunity, rationalization, capability, arrogance.

Keywords: Fraudulent financial statement, Pentagon Fraud

INTRODUCTION

Financial statements are an important element for companies. In presenting the financial statements, it must be in accordance with the actual condition of the company because the information from the financial statements will be used by interested parties. Management of companies that compile financial reports can commit fraudulent financial statements if it turns out that the performance of the company does not match the expectations of the company. So that company management in reporting company reports wants the financial statements to look good for interested parties. For this reason, there can be potential for financial statement fraud committed by the company. The desire to always look good to various parties' forces company management to manipulate in certain parts, so that in the end it presents improper information which will certainly harm many parties (Setiawati & Baningrum, 2018).

According to ACFE (2020), has conducted a survey which is summarized in the "Report to the Nations on Occupational Fraud Abuse – World Edition" where the results of the survey are the highest percentage, namely misuse of assets with a percentage of 86%, corruption of 43%, and fraudulent financial statements by 10%. The percentage of financial statement fraud is indeed the smallest, but the losses incurred are the largest, namely \$ 954,000 compared to the corruption of \$ 200,000 and misappropriation of assets of \$ 100,000.

In 1953, Cressey put forward a theory of fraud, namely the fraud triangle where there are 3 reasons for committing fraud. Where there is pressure, opportunity, rationalization. After that, the theory of fraud was developed again in 2004 by Wolfe & Hermanson called the diamond fraud theory where there are 4 reasons that cause fraud, namely the addition of 1 factor, namely capability. After that, the theory of fraud developed again in 2012, Crowe Horwath added one more factor, namely arrogance.

Fraud cases, especially in financial statement fraud, are a very crucial problem and cannot be underestimated. Therefore, this literature review is intended to explain the factors that can detect potential fraud on financial statements using the fraud pentagon theory. In addition, the purpose of this literature review is to detect what factors influence the occurrence of potential financial statement fraud in manufacturing companies. This research uses a systematic literature review and will answer the research questions that have been determined as follows: "What factors cause the most potential financial statement fraud in manufacturing companies?". This research is expected to add new insights into the most powerful factors in the potential for fraudulent financial statements in manufacturing companies.

LITERATURE REVIEW

Agency Theory

According to Jensen & Heckling (1976), agency theory is the relationship involved between the agent and the principal where the agent is the management and the principal is the stakeholder. In this theory, principals and agents have different interests where the principal expects high profits and the agent as company management expects high rewards as well and causes conflict of interest.

Financial Statement Fraud

Khafifah et al. (2022) stated that financial reports are reports that are used by leaders and related interested parties where the report contains financial information from the company, namely salary announcements, asset reports, and other reports. Financial statement fraud occurs when intentionally an employee causes a misstatement material information, for example by recording false income, understating reported expenses, and increasing reported assets (ACFE, 2020).

Fraud Triangle Theory

This theory proposed by Cressey (1953). There are 3 factors that causes fraud namely pressure, opportunity, and rationalization.

Fraud Diamond Theory

After the triangle theory, there is fraud diamond theory that proposed by Wolfe & Hermanson (2004) that adds 1 factor from fraud triangle theory, namely capability. Capability is the person recognized the fraud opportunity and this person can turn it into reality so this person could pull it off (Wolfe & Hermanson, 2004).

Fraud Pentagon Theory

This theory has 5 factors that causes fraud namely pressure, opportunity, rationalization, capability, and the last one is arrogance. Fraud pentagon theory proposed by Crowe Horwath in 2012. According to Crowe Horwath (2012), arrogance is the attitude of a person who feels superior and believes that internal control does not apply to personal.

RESEARCH METHOD

The method used in this research is systematic literature review (SLR). In conducting systematic literature review research, the author uses SLR research from Achimugu et al., (2014) in Izzati & Najwa (2018) as a reference in this paper. In writing a systematic literature review, it consists of 5 stages, namely formulating problems, searching for literature, sorting out the results of literature searches, analyzing, and understanding the search results.

According to Izzati & Najwa (2018), the following is an explanation of each step. The first stage is to formulate the problem in the form of research questions formulated based on the objectives of this literature review. The second stage is planning a literature search strategy designed in accordance with the formulated research questions consisting of identifying search keywords and searching for literature at literature provider institutions. The third stage is sorting

the literature search results that have been obtained based on predetermined sorting standards. The fourth stage is to analyze some literature from the previously sorted search results. The fifth stage is to understand the search results that have been summarized at the analysis stage.

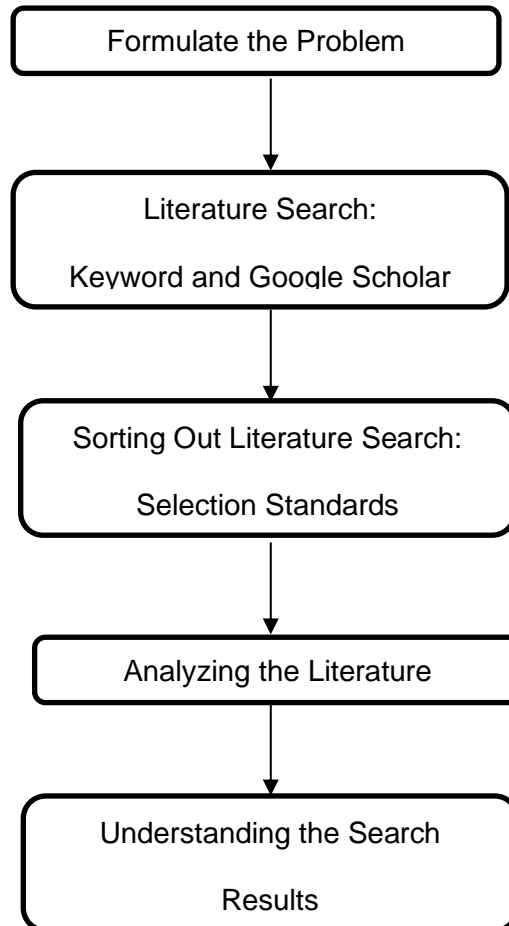


Figure 1. Methodology of Systematic Literature Review (SLR)

Formulate the Problem

The purpose of this study is to determine the factors that determine the potential for financial statement fraud with fraud pentagon analysis in manufacturing companies, it is necessary to formulate problems by formulating research questions (RQs). So that the research question of this study is "What factors cause the most potential financial statement fraud in manufacturing companies?"

Literature Search

The search in this study uses google scholar on publish or perish by using the keyword "Fraud Pentagon di Perusahaan Manufaktur" with a period of 5 years from 2018-2022. From the search conducted, there are 78 articles that discuss the fraud pentagon in manufacturing companies.

Table 1. Results of Literature Search

Keyword	Google Scholar
Fraud Pentagon di Perusahaan Manufaktur	78

Sorting Out Literature Search Results

The next step is to assess the search results by filtering the journals based on predetermined criteria. The standard criteria are:

1. The article conducts research on manufacturing companies.
2. Articles published in 2018-2022.
3. Articles that use factors included in the pentagon fraud theory.

After getting the search results of 78 research papers, the next step is to do the screenings of the research. From 78 research data, the elimination of thesis research and according to predetermined criteria is carried out to get 11 articles that match the criteria.

Analyzing the Literature

The fourth stage is to analyze the results of the literature search. The analysis is carried out by evaluating what are the factors that affect the potential for financial statement fraud in manufacturing companies.

Understanding the Search Results

The last stage is to understand the search results by showing the results and searches on factors that determine the potential for fraudulent financial statements in manufacturing companies.

RESULTS AND DISCUSSION

The results of the data set found were 78 articles with 11 articles that had been selected based on predetermined criteria. Based on the results of the 11 articles that have been selected, there are 13 variables examined by these articles with 10 variables that have a positive effect on fraudulent financial statements. The nine influential factors include: financial target, financial stability, external pressure, change in auditor, change in director, nature of industry, the quality of external auditor, ineffective monitoring, frequent number of CEO picture dan institutional ownership.

Based on the results of this observation, the variable that has been studied the most is the change of directors, namely 11 times. Followed by financial stability, the frequent number of CEO images, and the change of auditors, 10 times respectively. Financial targets 9 times. Other factors studied were external pressure 8 times, nature of industry 7 times, ineffective monitoring 6 times, quality of external auditors 4 times, personal financial needs 2 times, effective monitoring, and rationalization 1 time.

According to Statement on Auditing Standards (SAS) No. 99, there is undue pressure on management or operating personnel to meet financial targets set by those charged with governance or management, including sales incentive or profitability objectives (AICPA, 2002). In measuring the financial target will use the Return on Assets (ROA). Where Return on Total Assets (ROA) is a measure of operating performance and has often been used to see how efficiently assets have been used and also widely used for performance appraisal of managers so they can determine bonuses and salary increases (Skousen et al., 2008). Pradana & Purwanti (2020), found that financial target has a positive effect on fraudulent financial statement. Their result is also in line with Setiawati & Baningrum (2018), Ghandur et al. (2019), (Andri, 2021), Anggreini & N (2022). In contrast, Sindu Wijaya et al. (2019), Faidah & Suwarti (2019), Rachma Khairunnisa & Setiawati (2022) found that financial target did not affect fraudulent financial statement.

Financial stability is important to companies. According to SAS 99, Economic operating conditions, industry, or entity are threatened by financial stability (AICPA, 2002). Stable company finances can attract attention from external parties of the company so that if the company's finances are unstable, it can put pressure on management and cause a risk of committing fraud. Andri (2021) stated that if the change in total assets increases, there will be a potential risk of fraud in the financial reports. Sindu Wijaya et al. (2019), Pradana & Purwanti (2020), (Alfian & Tarjo, 2021), Rachma Khairunnisa & Setiawati (2022). On the other hand, Ghandur et al. (2019), Anggraini & Arifin (2022), (Anggreini & N, 2022) did not found any effect of financial stability on fraudulent financial statement.

External pressure occurs when the company's management is under pressure from external parties. A company is required to have good financial performance where this is the will of external parties who have high expectations at the level of profitability or investment analysis trends and there are requirements in stock exchange listings or debt contracts (Pradana & Purwanti, 2020). If the company's debt is higher than the total assets owned by the company, this puts pressure on management so that there is a risk of fraudulent financial reporting (Faidah & Suwanti, 2019). Pradana & Purwanti (2020) and Anggreini & N (2022) found that external pressure have a positive effect on fraudulent financial statement. In contrast, Setiawati & Baningrum (2018), Ghandur et al. (2019), Anggreini & N, (2022) did not find any effect of external pressure on fraudulent financial statement.

Nature of Industry is the ideal condition of the company in the industry. The industry, there are risks that may arise involving judgment and estimation, especially in accounts where the balance value is determined by the company which may be too large or significant, for example a bad debts account whose balance requires subjective assessment. Faidah & Suwanti (2019), Pradana & Purwanti (2020), Anggreini & N (2022) found that nature of industry affects fraudulent financial statement. On the other hand, Setiawati & Baningrum (2018), Andri (2021), Yanti & Munari (2021) found that nature of industry did not affect fraudulent financial statement.

Change in Auditor can create a potential risk of fraudulent financial reporting. This is because the detection of fraud by the company may be more detectable by the old auditor, either directly or indirectly (Anggraini & Arifin, 2022). Companies can cover up and eliminate all forms of fraud committed by changing a new auditor. Pradana & Purwanti (2020) and Yanti & Munari (2021) showed that change in auditor affect fraudulent financial statement. In contrast, Setiawati & Baningrum (2018), Faidah & Suwanti (2019), (Andri, 2021) found that change in auditor did not affect fraudulent financial statement.

Change in director is the factor that has been studied the most, namely 10 times. The existence of an opportunity for fraud can be serious if the company's directors are under high pressure, for example in increasing sales, recognizing weak controls in the company, forcing managers to manipulate sales contracts, and finally deceiving analysts and board members about company growth (Wolfe & Hermanson, 2004). Yanti & Munari (2021) stated that by changing directors because management is trying to improve the performance of the previous directors by making changes to the structure of the company or assuming that by changing directors because the new director has more ability than the old directors. Sindu Wijaya et al. (2019) and Yanti & Munari (2021) found that change in director affect fraudulent financial statement. In contrast, Ghandur et al. (2019), Pradana & Purwanti (2020), Andri (2021) found that change in director did not affect fraudulent financial statement.

Frequent Number of CEO Picture is a form of arrogance. This is supported by the CEO who has a high position in the company so that he has full control over the company and this can form the arrogant nature of the CEO. If many photos of the CEO in the financial statement, then it can reflect the level of arrogance of the CEO. Alfian & Tarjo (2021) found that frequent number of CEO picture has a positive effect on frequent number of CEO picture. On the other hand, Setiawati & Baningrum (2018), Faidah & Suwanti (2019), Rachma Khairunnisa & Setiawati (2022), Anggreini & N (2022).

CONCLUSIONS

This study conducts a review related to financial statement fraud by using pentagon fraud analysis. Based on the results of the 11 articles that have been selected, there are 13 variables examined by these articles with 10 variables that have a positive effect on fraudulent financial statements. The most frequently studied factor was a change in directors, namely 11 times, which means that all selected articles examined change in directors. The factors that have the most influence on fraudulent financial statements are financial targets and financial stability, each of which is 5 times.

This means that economic and industrial factors that threaten the company's financial stability will result in the potential for fraudulent financial reporting by the company. With unstable company finances, it causes the company's performance to decline, thereby providing pressure on management. This encourages management to manipulate financial statements in order to improve company performance. When this year's ROA is not as good as the previous year, the company's management is under pressure to maximize the company's ROA and it is because of this pressure that causes management potentially commits fraudulent financial statements.

This research is expected to be a reference for further researchers and complement the shortcomings in this study. For investors to be a reference for consideration in decision making. This research has limitations. The following are the limitations of this research: This research only focuses on one type of company, namely manufacturing companies and the observations in this study only focus on 5 years, namely 2018-2022. Based on the limitations that exist in this study, the authors provide suggestions for further research such as further research can increase the observation time span in order to obtain different and more significant results, further researchers are expected to use samples from different sectors of manufacturing companies in order to determine the potential for fraud reports in the other company sector, further researchers can add one other factor, namely the fraud hexagon theory proposed by Vousinas in 2019 and add one factor, namely collusion.

REFERENCES

- ACFE. (2020). *Report to the Nations on Occupational Fraud and Abuse*.
<https://acfe-public.s3-us-west-2.amazonaws.com/2020-Report-to-the-Nations.pdf>
- Achimugu, P., Selamat, A., Ibrahim, R., & Mahrin, M. N. R. (2014). A systematic literature review of software requirements prioritization research. In *Information and Software Technology* (Vol. 56, Issue 6, pp. 568–585). Elsevier B.V.
<https://doi.org/10.1016/j.infsof.2014.02.001>
- AICPA. (2002). *Consideration of Fraud in a Financial Statement Audit*.
<https://us.aicpa.org/content/dam/aicpa/research/standards/auditattest/downloadabledocuments/au-00316.pdf>
- Alfian, N., & Tarjo. (2021). The Influence Of Financial Stability, Ineffective Monitoring, Change In Auditors, Change In Directors, Frequent Number Of CEO's Picture Toward Fraudulent Financial Statement In Fraud Pentagon Perspective (Empirical Study on Manufacture Companies period 2015-2017 listed on BEI). *International Journal of Business and Management Invention (IJBMI)* ISSN, 10, 5–12.
<https://doi.org/10.35629/8028-1001030512>
- Andri, A. (2021). *Pengaruh Fraud Pentagon Terhadap Fraudulent Financial Statement pada Perusahaan Manufaktur di Bursa Efek Indonesia*.
- Anggraini, V. M., & Arifin, A. (2022). *Analisis Fraud Pentagon dalam Mendeteksi Financial Statement Fraud*.
- Anggreini, S. Z., & N, A. H. D. (2022). Pentagon Theory dan Model Beneish M-Score. *Jurnal Ilmiah Akuntansi Dan Keuangan*, 5(2), 965–973.
<https://journal.ikopin.ac.id/index.php/fairvalue>
- Cressey, D. R. (1953). *Other people's money; a study in the social psychology of embezzlement*.

- Crowe Horwath. (2012). *The Mind Behind The Fraudsters Crime: Key Behavioral and Environmental Elements*.
https://www.fraudconference.com/uploadedFiles/Fraud_Conference/Content/Course-Materials/presentations/23rd/ppt/10C-Jonathan-Marks.pdf
- Faidah, F., & Suwanti, T. (2019). Deteksi Financial Statement Fraud dengan Analisis Fraud Pentagon pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode Tahun 2015-2017. *Dinamika Akuntansi Keuangan Dan Perbankan*, 7(2), 147–162. <https://unisbank.ac.id/ojs/index.php/fe9/article/view/7454>
- Ghandur, D. I., Sari, R. N., & Anggraini, L. (2019). Analisis Fraud Pentagon dalam Mendeteksi Kecurangan Laporan Keuangan (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2014 s.d. 2016). *Jurnal Akuntansi*, 8(1), 26–40.
- Izzati, A. N., & Najwa, N. F. (2018). Pengaruh Stakeholder Perspective Dalam Penerapan ERP: A Systematic Literature Review. *Jurnal Teknologi Informasi Dan Ilmu Komputer*, 5(1), 41. <https://doi.org/10.25126/jtiik.201851540>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305–360.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=94043
- Khafifah, A., Haliah, Nirwana, & Alief Fahdal Imran Oemar, M. (2022). Model Implementasi dan Problematika Akuntansi Sektor Publik Pemerintah Daerah Dalam Mencegah Fraud Di Era Digital. *PARADOKS Jurnal Ilmu Ekonomi*, 5(4), 252–262.
- Pradana, N. A., & Purwanti, L. (2020). Pengaruh Fraud Risk Factor dengan Pendekatan Fraud Pentagon terhadap Kecurangan Laporan Keuangan Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI). *Jurnal Ilmiah Mahasiswa FEB*, 8(2).
- Rachma Khairunnisa, B., & Setiawati, E. (2022). Fraud Pentagon dalam Mendeteksi Financial Statement Fraud pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi yang Terdapat di Bursa Efek Indonesia Tahun 2018-2020. *Seminar Nasional Pariwisata Dan Kewirausahaan (SNPK)*, 1, 452–463. www.idx.co.id
- Setiawati, E., & Baningrum, R. M. (2018). Deteksi Fraudulent Financial Reporting Menggunakan Analisis Fraud Pentagon: Studi Kasus pada Perusahaan Manufaktur yang Listed di BEI Tahun 2014-2016. *Riset Akuntansi Dan Keuangan Indonesia*, 3(2), 91–106.
- Sindu Wijaya, M., Haikal, Dwinoto, Y., Suliantari, A., & Umar, H. (2019). Pengaruh Fraud Pentagon, Inflasi, dan Tingkat Suku Bunga Terhadap Kecurangan Laporan Keuangan (Studi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia). In *Seminar Nasional Cendekiawan ke* (Vol. 5).
- Skousen, C. J., Smith, K. R., Wright, C. J., & Chasteen Chair, L. G. (2008). *Detecting and Predicting Financial Statement Fraud: The Effectiveness of The Fraud Triangle and SAS No. 99*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1295494
- Wolfe, D. T., & Hermanson, D. R. (2004). The Fraud Diamond: Considering the Four Elements of Fraud. *CPA Journal*, 12(74), 38–42.
<https://digitalcommons.kennesaw.edu/facpubs>
- Yanti, D. D., & Munari. (2021). Analisis Fraud Pentagon Terhadap Kecurangan Laporan Keuangan Pada Sektor Perusahaan Manufaktur. *AKUISISI: Jurnal Akuntansi*, 17(1), 31–46. <http://www.fe.ummetro.ac.id/ejournal/index.php/JA>