

## IMPLEMENTATION OF FRAUD HEXAGON ON FINANCIAL STATEMENT FRAUD: SYSTEMATIC LITERATURE REVIEW

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### *ABSTRACT*

High numbers of cases of financial statement fraud involving several state-owned companies show the ineffectiveness of the audit process carried out. Therefore, it is necessary to carry out research related to financial statement fraud. This research aims to analyze and compare research results related to the influence of the fraud hexagon on fraudulent State-owned Company reports in Indonesia to provide new insights regarding future research opportunities. The method used for this research is Systematic Literature Review (SLR) and the literature selection technique used is PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses). The data source used is secondary data in the form of research articles from the Google Scholar database with a period of 2020-2023. There were 11 articles that met the inclusion criteria in this study. The results of this research show that there is only 1 type of research method carried out in this article, namely quantitative methods with secondary data collection techniques, namely open State-owned Company financial reports and the factors most researched are financial stability, turnover, and external pressure so that these three factors can be used as control variables in future research. Meanwhile, other factors can be used as additional variables that can be tested again to see the consistency of a study. With this research, it will be possible to increase the credibility of research regarding fraudulent financial statements in the future by using control variables from the results of this research.

**Keywords** : fraud hexagon; financial statement fraud; systematic literature review

## I. INTRODUCTION

The Association of Certified Fraud Examiners (ACFE) is an anti-fraud organization largest in the world who crowned Indonesia is the country ranked 4th as the most fraudulent country in the Asia Pacific in 2022 (Association of Certified Fraud Examiners (ACFE), 2022). The number of fraud cases in Indonesia reached 23 cases, consisting of corruption cases at 64%, misuse of state & company assets/wealth at 28.9%, and financial statement fraud at 6.7% (Association of Certified Fraud Examiners (ACFE), 2022). Apart from that, ACFE also considers that the parties most disadvantaged in fraud cases in Indonesia are the government with a percentage of 48.5%, state-owned companies with 31.8%, private companies with 15.1%, non-profit organizations with a percentage of 2.9% and others with 1.7% (Association of Certified Fraud Examiners Indonesia, 2019). The high losses caused by state-owned companies are partly due to cases of manipulation or engineering of financial reports carried out to obtain cash injections from the government and investors.

In 2022, the Kompas editorial team recorded a row of state-owned companies involved in cases of fraudulent financial reporting, namely PT. Jiwasraya, PT. Asabri,

and PT. Garuda Indonesia. PT Jiwasraya is a state-owned company operating in the cooperative and life insurance sector that has been committing fraudulent financial reports by posting false profits since 2006 and was only discovered in 2020. The state losses incurred reached up to IDR 16.8 trillion (Haryanti, 2023). A similar incident was also experienced by PT Asabri in 2019 where Asabri manipulated financial reports on the placement of investment funds, causing state losses of IDR 22.8 trillion (Christian et al., 2023). Not only that, in 2019 the Indonesian people were also shocked by the news of the financial reporting scandal that occurred at PT. Garuda Indonesia when Garuda Indonesia committed fraudulent revenue recognition and caused the country losses of up to IDR 8.8 trillion (Romys Binikasri, 2022). In this case, Sri Mulyani even suspended on the practice licensing of public accountants as regulated in Law Number 5 of 2011 concerning Public Accountants (Hidayati, 2019).

State-owned companies will also be in the spotlight in 2023, especially the state-owned construction and infrastructure sector. There are allegations of manipulation of the financial reports of two state-owned companies, namely PT

Waskira Karya Tbk (WSKT) and PT Wijaya Karya Tbk (WIKATAMA). Indications of fraud in the financial statements of these two companies occurred when there were discrepancies in bills during the credit restructuring of the two companies where both parties cheated their bookkeeping by hiding liability bills since 2016 (Melani, 2023). In 2020, WIKATAMA stated that the amount of profit they earned was IDR 322 billion, then this amount fell to IDR 214 billion in the following year and decreased to IDR 12.5 billion in 2022. Meanwhile, Waskita stated that the amount of profit they earned in 2020 was as much as IDR 9.28 trillion and will decline to IDR 1.67 trillion in 2022 (Tempo, 2023). Until now, the public is still waiting for the results of the Ministry of State-owned Company's investigation regarding the alleged manipulation of financial reports carried out by the two companies.

High numbers of cases of financial statement fraud involving several state-owned companies show the ineffectiveness of the audit process carried out. Therefore, to prevent similar incidents, it is necessary to carry out research related to financial statement fraud. Based on searches via the Publish or Perish application in previous research which has been widely cited in the 2020-2023 time period on the Google Scholar database, research on the topic of financial report fraud in state-

owned companies has been widely carried out. However, this research is limited to using the fraud hexagon theory to show the factors that can influence the occurrence of fraudulent financial statements.

Several previous studies have shown that the fraud hexagon factors that influence identifying fraud in financial reports include the pressure factor (Lorena, 2019), chance (Septriani & Desi Handayani, 2018), rationalization (Abbas et al., 2020), competence (Hartanto et al., 2019), arrogance (Elviani et al., 2020), and collusion (Kanten & Ulker, 2013). However, several studies show different research results where the fraud hexagon factor has no effect in identifying financial statement fraud, including pressure factors (Mintara & Hapsari, 2021), chance (Rizqi & Purwanto, 2022), rationalization (Widiastika, 2021), competence (Mintara & Hapsari, 2021), arrogance (Agustina & Pratomo, 2019), and collusion (Rizaldi & Shonhadji, 2020).

Apart from that, further searches have been carried out on the Google Scholar database and no research has been found on the topic of fraud hexagon on financial statement fraud that uses the Systematic Literature Review method. Therefore, this research takes the title Implementation of the Fraud Hexagon on Financial Report Fraud using the Systematic Literature

Review method which aims to analyze and compare the results of previous research to provide new views regarding future research opportunities. The large number of studies regarding fraud hexagons with various variables makes the credibility of research related to fraud hexagons questionable, with this research, it will be possible to increase the credibility of research regarding fraudulent financial statements in the future by using control variables from the results of this research.

## II. RESEARCH METHOD

The method used in this research is a Systematic Literature Review (SLR). SLR is a term used to refer to research methodology or specific research and development carried out to collect and evaluate research related to a particular topic focus. In reviewing the literature, the SLR method is considered one of the most objective and systematic methods. The stages in carrying out this SLR, generally consist of 3 major parts, namely (1) Planning, which is the initial stage in the SLR process (2) Conducting, which is the implementation stage or SLR process, and (3) Reporting, which is the stage of writing the SLR report (Herlina & Yacob, 2022).

### Planning

The research aim to determine the effect of implementing the fraud hexagon theory in detecting fraudulent financial statements in state-owned companies in Indonesia. To achieve this goal, there are two research questions or Research Questions (RQ) that are used to guide the literature search and extraction process as follows:

RQ 1: What methods are used to analyze fraudulent financial statements?

RQ 2: What are the factors in the fraud hexagon that are proven to influence its occurrence fraudulent financial reports in state-owned companies?

### Conducting

#### 1. Literature Search

In this research, the data source used to search for literature was through the Publish or Perish application in previous research which was widely cited in the 2020-2023 time period on the Google Scholar database. This data source was chosen because there are a large number of journals and articles in full text so they can be used as objects in this research. The keywords and boolean operators used to expand and make the literature search more specific are "Fraud Hexagon" AND "Financial

Statement Fraud" OR "Financial Statement Fraud" AND "BUMN".

## 2. Selection of Literature Search Results

There are two criteria used in this research, namely inclusion criteria and exclusion criteria. These two criteria will be used to find out whether the data can be used or not. The following are the inclusion criteria in this study:

- 1) Source of scientific journals and/or Google Scholar proceedings
- 2) Scientific journals and/or proceedings have open-access
- 3) Articles must be accessible in full-text
- 4) Article on the topic of fraud hexagon
- 5) Article with the research object of financial statement fraud in state-owned companies
- 6) Articles use Indonesian and English
- 7) Articles published between 2020 and 2023

Literature selection uses the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) method as can be seen in the following diagram:

Source: Processed Data, 2024

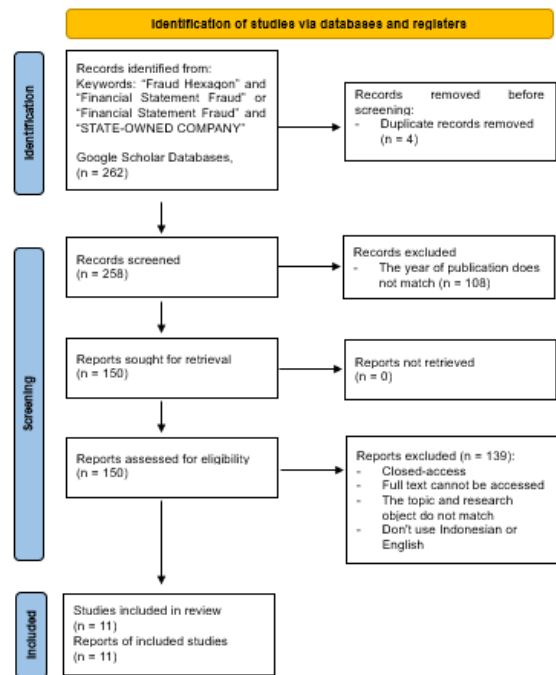


Image 1.  
PRISMA Method

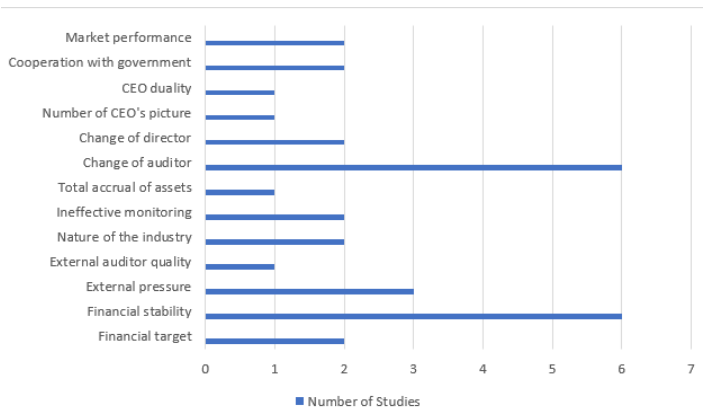
Based on the results of literature selection using the PRISMA method, 11 articles were obtained that met the criteria and were used in the analysis of literature search results.

## III. RESULTS AND DISCUSSION

Based on the results of the analysis carried out on these 11 articles, it was found that all articles used quantitative methods. The use of quantitative methods is considered capable of providing valid measurement results for the authors' hypotheses and this method is carried out by analyzing secondary data, namely state-owned company financial reports which are open and can be accessed on the website

[www.idx.co.id](http://www.idx.co.id). In addition, the results obtained were 13 proxy variables for each factor in the fraud hexagon which influenced on fraudulent financial statements in state-owned company. Pressure is proxied by the variables of financial target, financial stability, and external pressure. Opportunity is proxied by the variables of external auditor quality, nature of the industry, and ineffective monitoring. Rationalization is proxied by the variables total accrual of assets and change of auditor. Competence is proxied by the director turnover variable. Arrogance is proxied by the variables number of CEO's picture and CEO duality. Collusion is proxied by the variables of cooperation with the government and market performance. The following graph shows the number of studies that show that these factors have a significant influence on the occurrence of fraud in state-owned company financial reports:

Source: Proccesed Data, 2024



**Graph 1.**  
 Effect of Fraud Hexagon

From the results of the analysis of the graph above, it can be seen that the factors most researched are financial stability and changing auditors 6 times each and external pressure 3 times each. Meanwhile, other factors, namely financial targets, nature of the industry, ineffective monitoring, change of directors, and cooperation with the government, were studied twice and the least researched factors were the quality of external auditors, total accruals on assets, number of CEOs picture and CEO duality each studied once.

Financial stability is a condition that describes the company's financial condition as a stable condition. However, the existence of economic and industrial factors that can threaten the company will also threaten financial stability. The results of research conducted by (Cahya & Aris, 2023) stated that financial stability plays an important role in causing fraudulent financial statements. The results of this research were examined by researchers (Atika Gando Suri dan Annisaa Rahman, 2023; Ayati et al., 2023; Rizkiawan & Subagio, 2023; Rusli et al., 2023; Yadiati et al., 2023). The change in auditors in management is assumed to be a way to cover up or even eliminate traces of financial statement fraud committed and known by the previous auditor. Research conducted by (Ayati et al., 2023) shows that with a change of auditor, the opportunity for fraud to

arise in the financial statements is very large. Not only that, but several researchers also support the results of this research, among others (Andhika Endratama & Astuti, 2023; Hartadi, 2022; Rizkiawan & Subagio, 2023; Rusli et al., 2023; Yadiati et al., 2023). External pressure is the pressure faced by management to meet the expectations of third parties. This pressure from external parties makes companies have to present good financial proforma because it is used to attract potential investors. The results of research conducted by (Hartadi, 2022; Rusli et al., 2023; Yadiati et al., 2023) show that the high pressure from outside faced by management causes management to commit various frauds to meet targets.

#### IV. CONCLUSION

Based on the research results in the discussion, it can be concluded that there is only 1 type of research method carried out in this article, namely quantitative methods with secondary data collection techniques, namely open state-owned company financial reports. This method was chosen because it was considered capable of providing valid measurements of the authors' hypotheses. Of the 11 articles selected, the factors most researched were financial stability, turnover, and external pressure so that these three

factors can be used as control variables in future research. Meanwhile, other factors, namely financial targets, nature of the industry, ineffective monitoring, change of directors, cooperation with the government, quality of external auditors, total accruals on assets, number of CEO's pictures, and CEO duality can be used as additional variables that can be tested again to see the consistency of a study. There are limitations in the research that influence the results of this research, namely the scope of the data sources is not broad enough so the number of articles analyzed is not comprehensive. Therefore, it is hoped that future research will expand the scope of data sources so that it can obtain more consistent research results.

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