



Maksimum: Media Akuntansi Universitas Muhammadiyah Semarang, Vol 14 (No.1) 2024,  
114-135

<https://jurnal.unimus.ac.id/index.php/MAX>

Nationally Accredited based on the Decree of the Minister of Research, Technology and  
Higher Education, Number 1429/E5.3/HM.01.01/2022



## Impact of Whistleblowing System between The Vousinas Fraud Hexagon Theory and Financial Statement Fraud

Muhammad Rafi Raihan<sup>1</sup>, [Imang Dapit Pamungkas](#)<sup>2\*</sup>, Enny Susilowati Mardjono<sup>3</sup>, [Yulita Setiawanta](#)<sup>4</sup>

<sup>1234</sup> Department of Accounting, Universitas Dian Nuswantoro, Indonesia

\*Corresponding Author

### Info Article

History Article:

Submitted: January 08, 2024

Revised: January 31, 2024

Accepted: February 27, 2024

Keywords:

*Fraud Hexagon Theory,  
Whistleblowing System,  
Financial Statement Fraud*

### Abstract

This study examines and analyzes the impact of pressure, opportunity, rationalization, capability, ego, and collusion on financial statement fraud. Testing of the whistleblowing system variable is a moderating variable in the relationship between the fraud hexagon theory variable and financial statement fraud. Purposive sampling resulted in a total of 120 observation data. Data was collected from annual and sustainability reports from 68 state-owned enterprises on the Indonesia Stock Exchange (IDX) in 2019-2022. The data were processed and analyzed using WarpPLS 7.0 software. This research confirms that WBS can reduce the link between pressure and FSF and that pressure directly affects FSF. Any other variables cannot directly or indirectly influence financial statement fraud. The novelty of this research is the whistleblower system variable, which moderates the association between financial statement fraud and the factors of the fraud hexagon theory.

JEL Classification: G32, M41, M42

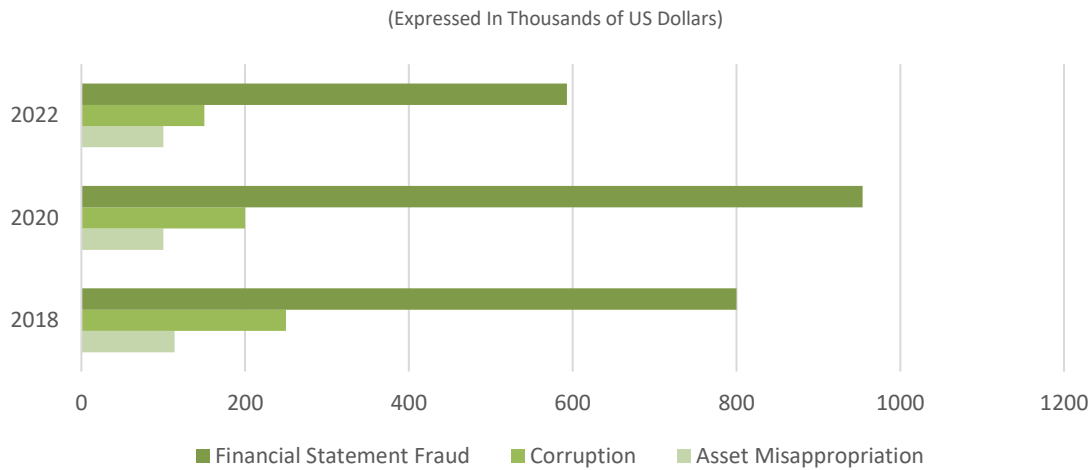
How to Cite: Raihan, M.R., Pamungkas, I.D., Mardjono, E.S., & Setiawanta, Y. (2024). Impact of Whistleblowing System between The Vousinas Fraud Hexagon Theory and Financial Statement Fraud. *Maksimum: Media Akuntansi Universitas Muhammadiyah Semarang*, 14(1), 114-135

DOI: [10.26714/mki.14.1.2024.114-135](https://doi.org/10.26714/mki.14.1.2024.114-135)

Copyright © 2024 Authors. This work is licensed under a Creative Commons Attribution-Non-Commercial No Derivatives 4.0 International License (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

## Introduction

Financial reports (FR) are released to communicate company performance (Handoko et al., 2022). Users will use the information to consider decisions (Akbar et al., 2021). When the performance presented does not match stakeholders' expectations, fraud will occur on various occasions (Mukhtaruddin et al., 2022). Agustina and Pratomo (2019) outlined how this was done to benefit one of the parties and was categorized as financial statement fraud (FSF). According to the fraud tree, FR manipulation can result in at least seven forms of fraudulent conduct that could financially affect a company. Association of Certified Examiners (ACFE) disclosed that the fraction of cases with the lowest number but the most significant losses globally in 2022 was known as FSF. In actuality, asset misappropriation with the highest percentage of instances only results in a \$100,000 loss in 2022. Given that this event occurs every year, the losses experienced by FSF are extremely significant each year.



**Diagram 1.** Financial Losses Based on Type of Fraud (ACFE, 2018-2022)

In Indonesia, Dihni (2022) stated that FS manipulation was the most common fraudulent scheme, with 23 occurrences involving 134 directors or management staff at SOEs. The pandemic also led to an upsurge in corruption within SOEs (Primayogha, 2022). Hermansjah et al. (2021) recall that SOEs are companies whose ownership is shared by the government.

Dihni (2022) indicated that 119 corruption cases involving financial sector organizations within SOEs resulted in state losses totaling 47.9 trillion rupiah between 2016 and 2021. According to the survey, 53.1% of those who committed fraud were directors or members of management (ACFE Indonesia, 2019). The Jiwasraya FR manipulation lawsuit is one of the largest until 2021 (Achmad et al., 2022). For twelve years, fictitious profit reporting was done to windowdress the management's strong performance (Rachman, 2020). Jiwasraya also received an adverse opinion in 2017, even when they made a profit of 360.3 billion rupiah (Nugroho, 2020). The appointment of a new CEO in 2018 brought this situation to light. The state has suffered significant damages from cases involving comparable corporations to Asabri. Records show that Asabri inflicted losses totaling 23 trillion rupiah between 2012 and 2019 (Sidik, 2021). There is bias in evaluating the investments' liquidity because of the arrangements made during the investing process by confident Asabri Directors (Idris, 2021). Bank Rakyat Indonesia (BRI) employees were also implicated in a fictitious credit case resulting in a 2.2 billion rupiah expense to the state (Putri, 2022). By recognizing

retained earnings that weren't supposed to be recorded, Garuda Indonesia also became entangled in a case involving FR manipulation (Hidayati, 2019). Numerous fraud cases at Indonesian SOEs have resulted in significant national losses. Solutions are required to handle and prevent future fraud to address the severity of the scam.



**Diagram 2.** Fraud Disclosure Methods (ACFE, 2018-2022)

Currently, every organization handles fraud differently. According to ACFE's statistics, tips are probably the most common way to identify instances of fraud. Tips are defined as disseminating information to authorities about the organization's whistleblowing system (WBS) by various means. Hotline calls, web-based reporting, or email can report information. Companies with a WBS were three times more adept at identifying warning signals of impending fraud than those without (Association of Fraud Certified Examiners, 2022). The ACFE Indonesia report (2019), which disclosed the number of reports about fraud incidents, further confirms it. Employee involvement in reporting fraud as active whistleblowers supports this method as well. According to ACFE Indonesia (2019), up to 50% of Indonesian whistleblowers held a job as an employee.

Multiple research efforts into this subject have yielded a variety of contradictory findings. Research by Mukaromah and Budiwitjaksono (2021) and Sagala and Siagian (2021) disclosed that the likelihood of FSF happening rises in proportion to the amount of pressure applied. Asmah et al. (2020) showed that there was a relationship between FSF and weak control. Control can play a role in protecting the system against several staff members' attempts at fraud. Avortri and Agbanyo (2021) revealed that one of the major causes of FSF is rationalization. People who work closely with money will shrewdly search for ways to justify their dishonest behavior; according to Lionardi and Suhartono (2022) and Reurink (2018), a person's ability might give fraudsters the courage to be confident in their transgressions. Khamainy et al. (2022) and Oktavia et al. (2022) revealed that pressure, opportunity, rationalization, and capability do not affect FSF. The argument is supported by Chantia et al. (2021), who indicate that FSF is not significantly impacted by capability or rationalization.

Aulia Haqq and Budiwitjaksono (2020) and Handoko et al. (2022) conclude that FSF is impacted by the quantity of CEO pictures included in the annual report (AR), which serves as a stand-in for their ego. Aviantara (2021) disclosed that the FSF was impacted by collusion as measured by audit fees. According to the data presented, auditors frequently find it challenging to be objective in their opinions due to the substantial audit fees they earn. In actuality, Achmad et al. (2022) and Nurhidayah and Kusumawati (2023)

disclosed the opposite findings, namely that the occurrence of FSF was unaffected by ego or collusion. The CEO's photo's intense appearance attempts to introduce the current management. The tendency for FSF to occur is also unrelated to achieving management performance. [Nugroho and Diyanty \(2022\)](#) and [Rahma and Sari \(2023\)](#) concur that collusion has no impact on FSF. The audit fee is intended to compensate the auditor for the risks they encountered during the assignment, not to be correlated with fraudulent agreements. [Amyar et al. \(2023\)](#) and [Makhmuro and Nurcahya \(2023\)](#) demonstrated the significant impact and function of the WBS in fraud detection. [Sihombing and Panggulu \(2022\)](#), [Srikandhi and Suryandari \(2020\)](#) showed that because whistleblowers were not proactive, WBS had little impact on the FSF.

The FSF suffered significant losses, making it even more urgent to discover a way to stop this kind of fraud from happening again. Internal control systems can be used to avoid fraud ([Puryati & Febriani, 2020](#)). To sustain and preserve the entity's financial health, a business must practice prevention ([Sudjono, 2023](#)). With the involvement of several stakeholders, WBS provides solutions for identifying and managing fraud incidents. Implementing WBS aims to guarantee stakeholders that all organizational components contribute to lowering the risk of misconduct ([Rani et al., 2022](#)). BUMN entities are obliged to use WBS as a control tool through KNKG. The novelty of this research is that it places the whistleblowing system variable as a moderator of the fraud hexagon theory variable in its influence on the FSF. Generally, a WBS will be used as a measurement method for a test. Ideally, implementing a WBS must also be equipped with good quality user human resources. This research aims to reveal the relationship between pressure, opportunity, and rationalization on FSF. The ties that capability, ego, and collusion have with FSF will also be tested through this research. This research also aims to test the WBS variable as a moderator of the relationship between the fraud hexagon theory variable and the FSF in the scope of SOEs. In light of this, it is envisaged that the research will offer organizations fresh perspectives on fraud prevention in the BUMN setting. Organizations could also consider enhancing WBS utilization within their organizations. It is also anticipated that readers from the general public would comprehend the significance of working together to report fraud that happens through the WBS that the entity started. Additionally, this research can help external and internal audit teams ensure fairness and identify organizational fraud.

### **Hypothesis Development:**

#### **Fraud Hexagon Theory**

[Cressey \(1953\)](#) publicizes the first version of the fraud theory model, which is called fraud triangle theory, with three different variables. The elements of the fraud triangle theory are pressure, which is the same as unshareable financial needs, perceived opportunity, and the perpetrator's rationalization of their conduct ([Theotama et al., 2023](#)). [Wolfe and Hermanson's \(2004\)](#) elaboration of this theory promoted using capability as a new variable. This variable analyzes the link between management's fraud-committing ability and fraudulent acts. The hypothesis that is developed is that a person's capacity for cheating on the next occasion is influenced by their capability. [Crowe \(2011\)](#) added arrogance as a new component to his fraud pentagon theory model as this theory advances. The model was then improved by [Vousinas \(2019\)](#) by adding a sixth variable, collusion. The earlier fraud pentagon theory was developed into the fraud hexagon theory. Vousinas introduced this idea with his S.C.O.R.E model, which was expanded by including a new variable called collusion. Vousinas contended that uncovering fraud perpetrated in groups would be considerably more challenging. [Rahma and Sari \(2023\)](#) stated that cooperation amongst fraudsters could result from collusion, allowing for the creation of fraudulent act schemes. An indicator of fraud that results from multiple parties working together for the benefit of their group is what Vousinas wants to examine from the use of the collusion variable itself.

### **Financial Statement Fraud**

Fraud is an illegal action involving motive, dishonesty, concealment, and violation of entrusted information (Fauziah, 2022). This inherent factor in fraud can lead to misunderstandings and mistakes when interpreting the data in financial statements. Financial information is frequently the target of fraud and manipulation by multiple parties. According to Fathmaningrum and Anggarani (2021), FSF intentionally publicizes, discloses, or falsifies financial information to mislead the data's understanding. According to Bhaktiar and Setyorini (2021), the management of a corporation that wants to generate personal profits is typically the FSF perpetrator. Criminals can commit fraud for various reasons, not just for their financial gain. Nasir et al. (2019) stated some factors contribute to FSF, including a CEO's poor financial skills and understanding, weak internal control, and meager remuneration. One of the other possible causes of FSF is shareholder pressure. According to Septriani and Handayani (2018), management pragmatically presents goals established by shareholders in a way that disregards relevant accounting norms. Therefore, manipulation frequently takes place to satisfy these objectives.

### **Whistleblowing System**

Disclosures about fraud are frequently delicate and sometimes even hazardous to make public. This method serves as a tool to identify instances of fraud. Internal audits from every organization will ensure WBS oversight (Maisaroh & Nurhidayati, 2021). When the WBS's function is optimized, fraud will be much easier to find (Ariyanto & Bone, 2020). According to ACFE (2020), businesses that can train their staff in WBS will have far more success in combating fraud within the organization. Without worrying about information being extensively disseminated to the public, managers can tackle internal issues using WBS (Siregar et al., 2022). This benefit can assist management in upholding the company's positive reputation (Nurhidayat & Kusumasari, 2018).

### **Pressure on Financial Statement Fraud**

The motivation that drives fraudulent actions can be pressure (Fitriyah et al., 2021). Pressure can encourage positive growth in firm performance by management every year (Anisykurlillah et al., 2023). However, fraud can also grow due to the pressure received (Yusrianti et al., 2020). The pressure received can come from anywhere, from the manager's financial condition to the company (Hashim et al., 2020). One example is investor expectations regarding management performance in managing company assets (Ozcelik, 2020). Conflicts of interest drive FSF, which is motivated by incentives offered for managers' performance to meet the shareholders' expectations (Khamainy et al., 2022). Fraudulent acts can also be driven by extra incentive motives received when financial targets are achieved (Akbar et al., 2021). The pressure becomes more robust when the manager's wealth and needs depend on his performance. When management knows their actions are hazardous, they will still do it for the incentives offered to them. Several studies have produced results that are in line with the hypothesis. The results of research by Akbar et al. (2021) state that the higher the target that needs to be achieved, the higher the probability of FSF occurring. Septriani and Handayani (2018) research reveals that financial targets influence FSF. The high return on assets (ROA) in the previous period encouraged an increase in financial targets in the last year and triggered the risk of fraud. Owusu et al. (2022) also revealed that pressure can affect FSF. The perpetrator commits fraud in financial or non-financial forms based on pressure from work or family.

**H1:** *Pressure has an effect on financial statement fraud*

### **Opportunity on Financial Statement Fraud**

Poor corporate Governance, audit quality, and internal controls can increase the probability of fraud by management (Mulya et al., 2019; Yusrianti et al., 2020; Zakaria & Mohammed, 2021). According to Hashim

et al. (2020), fraud perpetrators only need to be confident about the weakness of control and their ample opportunities. Weak control also opens up gaps for perpetrators to learn the control system to manipulate it easily (Situngkir & Triyanto, 2020). One way to measure opportunity is the control system's effectiveness (Oktavia et al., 2022). The board of commissioners holds a supervisory function to improve the quality and effectiveness of internal control (Khamainy et al., 2022). Effective monitoring mechanisms can minimize and control the possibility of fraudulent acts (Le & Tran, 2018; Septriani & Handayani, 2018). The balance of the number of board of commissioners also needs to be considered to prevent the monitoring system from being weakened from within (Fathmaningrum & Anggarani, 2021). Research by Owusu et al. (2022) reveals that fraud in the world of work is driven by opportunity. A weak control system makes perpetrators more confident that their actions will not be detected (Fitri et al., 2019). These hypotheses align with the result of research by Meidijati and Amin (2022), which explains that effective monitoring has a negative and significant relationship with FFS. The weaker the control, the more daring the manager will be to commit fraud.

**H2:** *Opportunity has an effect on financial statement fraud*

### **Rationalization of Financial Statement Fraud**

Jannah and Rasuli (2021) define rationalization as justifying a violation or fraud committed by perpetrators. The rationalization commonly expressed considers theft to be an action to take away one's rights (Association of Certified Fraud Examiners, 2020). Rationalization is carried out so that the perpetrator is free from feeling guilty about his actions (Yusrianti et al., 2020). Oktavia et al. (2022) explained that perpetrators tend to normalize their actions. Rahma and Sari (2023) emphasize that normalization can be used to manipulate balances recorded in financial reports and steal them. However, Septriani and Handayani (2018) argue that auditors help companies detect fraud. This motivates several companies to change auditors, especially when management is suspected of committing fraud (Ratnasari & Solikhah, 2019). The aim is to remove fraud trials discovered by previous auditors (Sasongko & Wijyantika, 2019). Handoko et al. (2022) emphasized that the high intensity of changing auditors in a company is linear with the possibility of FSF. Research conducted by Septiningrum and Mutmainah (2022) supports the hypothesis that rationalization influences FSF. Using a proxy for changing auditors is suspected to be utilized to eliminate fraud trials. This is also in line with the research results of Avortri and Agbanyo (2021), which explain that rationalization is a driving factor for fraud committed by banking staff.

**H3:** *Rationalization has an effect on financial statement fraud*

### **Capability of Financial Statement Fraud**

Personal skill in committing fraud is the definition of the capability variable (Rahma & Sari, 2023). This variable correlates with a manager's ability to manipulate the company's internal control system. Fraud is only possible through personnel who have good skills and knowledge about the company they manage (Septiningrum & Mutmainah, 2022). It will also be easier for perpetrators to commit fraud when they find the right opportunity (Fitriyah et al., 2021). A manager or company director often owns this criterion. With capability, fraudsters will succeed in carrying out their actions. This variable is measured using CEO turnover. Sari et al. (2020) revealed that the FSF level is linear with the intensity of CEO turnover in a company. The intensity of CEO turnover has two general indications that are directly correlated with FSF. The first indication is that during the leadership transition period, the intention to commit fraud grows due to opportunities that arise from the stressful conditions experienced by the company (Achmad et al., 2022). This condition gives rise to information asymmetry, which fraudsters can exploit to carry out their intentions (Handayani et al., 2023). This research is supported by the results of Sasongko and Wijyantika



(2019), which reveal that capability influences FSF. This is in line with the findings of [Sunardi and Amin \(2018\)](#), which explain that FSF is strongly indicated when directors experience change.

**H4:** *Capability has an effect on financial statement fraud*

#### **Ego on Financial Statement Fraud**

Ego or arrogance is a person's arrogant attitude, believing that no control system can regulate him ([Vousinas, 2019](#)). This attitude appears when the manager is considered essential and influential in the company ([Syifani, 2021](#)). [Faradiza \(2019\)](#) revealed that managers with this attitude tend to commit fraud due to arrogance. This is also driven by the social status they have and maintain. Managers will do anything to keep their status and superiority. The number of CEO photos listed in financial reports is used to measure a person's level of arrogance ([Chantia et al., 2021](#)). Company executives show their existence and superiority to maintain social status ([Septriani & Handayani, 2018](#)). Managers also try to show that companies operating under their auspices have optimal performance ([Septiningrum & Mutmainah, 2022](#)). Managers do not want to be left behind by not showing their achievements and positions in their companies ([Khamainy et al., 2022](#)). [Rahma and Sari \(2023\)](#) revealed that ego or arrogance influences FSF. Managers with high levels of ego show a risk of fraud due to arrogance in their position. This is in line with research by [Mulya et al. \(2019\)](#), which states that the large number of CEO photos indicates his arrogance. The research results of [Oktavia et al. \(2022\)](#) also state that the ego of company executives can tend to cause fraud.

**H5:** *Ego has an effect on financial statement fraud*

#### **Collusion on Financial Statement Fraud**

[Vousinas \(2019\)](#) defines collusion as cooperation between parties in an organizational environment. [Syifani \(2021\)](#) criticized that at least two people should ideally carry out collusion. Collusion is the newest variable in this theory ([Oktavia et al., 2022](#)). [Rahma and Sari \(2023\)](#) explain that collusion encourages the formation of evil conspiracies to build fraudulent action schemes. Losses can increase when collusion is carried out collectively ([Khamainy et al., 2022](#)). [Susandra and Hartina \(2017\)](#) explain the characteristics of conspiracy, namely the presence of intermediaries in the procurement of goods and services as well as easing incentives to make a process more accessible. Differences in auditor fees each year indicate collusion between auditors and management or directors in office ([Ghaisani et al., 2022](#)). This research is supported by the results of [Wahyulistyo and Cahyonowati \(2023\)](#), who stated that collusion is the most vital variable influencing fraud. This finding is funded by the statement that individuals, staff, or management have and understand ethics in financial management.

**H6:** *Collusion has an effect on financial statement fraud*

#### **Whistleblowing System Moderates Pressure on Financial Statement Fraud**

[Bunga et al. \(2020\)](#) and [Puryati and Febriani \(2020\)](#) reveal that a WBS is a highly successful strategy in preventing the incidence of FSF. WBS operates around the tenet that any activity, whether taken inside or outside of an organization, that implies fraud occurs must be reported ([Masdiantini et al., 2021](#); [Meiryani et al., 2023](#); [Pamungkas et al., 2020](#)). [Sow et al. \(2018\)](#) said that opportunities frequently cause fraud. According to [Hanifah and Clyde \(2022\)](#), this circumstance gives WBS the chance to minimize and reduce the opportunities that fraudsters have. WBS exists in an entity, and fraudsters may also feel the dread effect ([Siregar et al., 2022](#)). This result guarantees that every employee contributes to reducing the risk of fraud ([Rani et al., 2022](#)). Implementing the WBS also progressively reduces the risk of partnering with egotistical leaders. [Citranagari \(2023\)](#) findings show that WBS aids auditors in detecting fraud.

**H7:** *Whistleblowing System weakens Pressure on FSF*

### **Whistleblowing System Moderates Opportunity on Financial Statement Fraud**

When doors are open, and possibilities present themselves, fraud can occur. Weak supervision and control within a system are frequently the source of this problem. Fraudsters can act however they like, particularly if their transgressions do not frighten or discourage them. One form of supervision that BUMN entities can initiate is WBS. This system helps any party to reveal witnessed fraud. The forms of WBS can be varied, such as those mentioned by [ACFE \(2022\)](#), such as hotlines, web-based reporting, and even email. It is believed that the range of media used to disclose fraud through WBS can lessen fraudulent intents. Another motivating aspect is the high level of participation from different parties. Additionally, reports disseminated through WBS media will be sent to the board of commissioners and audit committee for prompt action and inquiry. Studies by [Bagianto and Hendriyana \(2021\)](#) concur that WBS can affect the likelihood of fraud occurring in an entity.

**H8:** *Whistleblowing System Weakens Opportunity on FSF*

### **Whistleblowing System Moderates Rationalization on Financial Statement Fraud**

Fraudsters frequently utilize rationalization to support their fraudulent actions. [Vousinas \(2019\)](#) states they thought they had rights over the fraudulent object, so this illegal activity is justified as a self-serving effort. To maintain investors' faith in the profits the company may share, management may pretend to falsify financial reports to present a positive picture of its success. At that point, the plot gets embraced by additional people and solidifies into the corporate culture. However, since the information given is false, this is regarded as unlawful behavior in the context of fraud. A rigorous surveillance mechanism is required to lessen the likelihood that this illicit activity will continue. To strengthen oversight, WBS provides a place where multiple stakeholders can participate. Using WBS as monitoring can lower the possibility of fraud ([Sudjono, 2023](#)).

**H9:** *Whistleblowing System Weakens Rationalization on FSF*

### **Whistleblowing System Moderates Capability on Financial Statement Fraud**

A component that finally gives fraudsters hope that they can carry out their actions—not just once, but repeatedly—is known as capability. This variable is the same as rationalization, but capability is the capacity to deceive. This trait also emerges from within the individual and changes as he gains experience during his professional life. Control attempts can differ. Enforcing sound corporate Governance can help curb the inclination to misuse one's position of authority and skills. One criterion for assessing how well corporate Governance is being implemented in an organization is how the WBS is implemented. The organization has a well-established WBS that makes it simple to report abuses of authority. Based on their talents and power, this circumstance may lessen the desire of all workers, including management and staff, to conduct fraud. [Maulida and Bayunitri \(2021\)](#) state that WBS could help an entity prevent and reduce the number of existing frauds.

**H10:** *Whistleblowing System Weakens Capability on FSF*

### **Whistleblowing System Moderates Ego on Financial Statement Fraud**

His ego characterizes the CEO's attitude toward his position of authority and status. Because of this information, the CEO was thought to possess narcissistic qualities. The frequency with which the CEO's photo appears is used in this research to measure the ego variable, which measures the degree of narcissism as a representation of the CEO's ego or arrogance. Only some CEOs can quickly get to this position of authority and influence. Therefore, they frequently attempt to hold onto their position, even if it means engaging in dishonest behavior. Situations such as these require careful management in advance. This threat is not only the fault of the audit committee and supervisory board. In this situation,



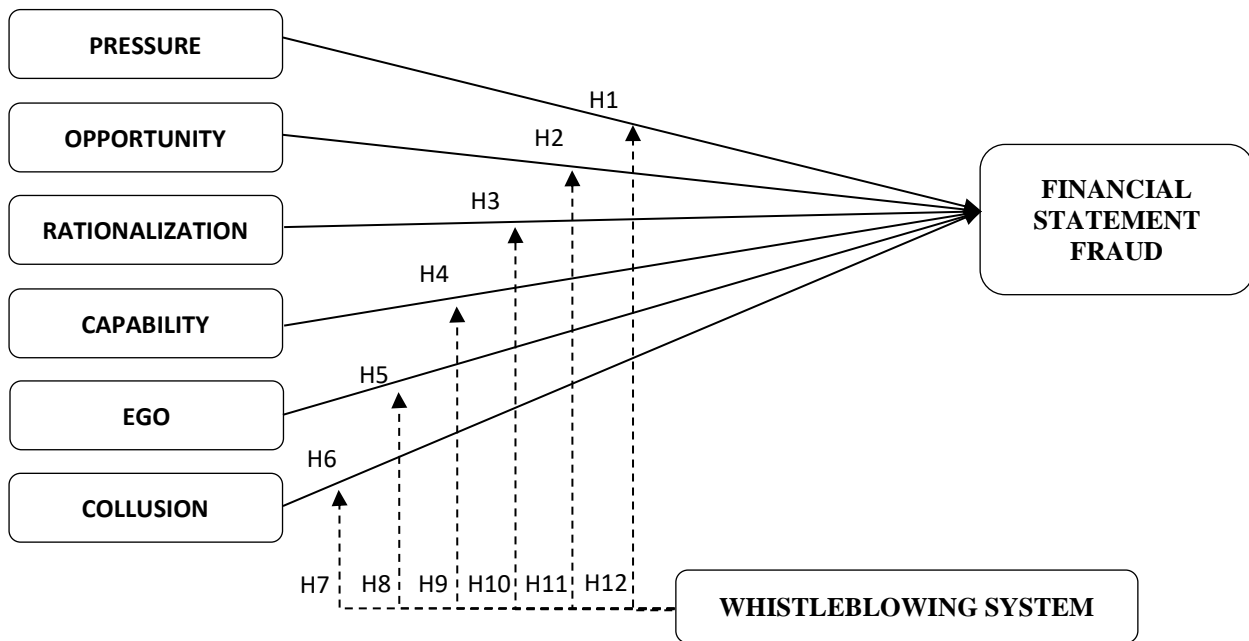
WBS is needed to boost the involvement of other staff members and even members of the public in reporting signs of fraudulent activity. Effectively implemented WBS can stop and outperform fraud situations, particularly FSF (Association of Fraud Certified Examiners, 2022). According to Okafor et al. (2020), the most effective method for reducing fraudulent activities in a culture of democracy is to employ WBS.

**H11:** *Whistleblowing System Weakens Ego on FSF*

**Whistleblowing System Moderates Collusion on Financial Statement Fraud**

An agreement between people cooperating to benefit their group is known as collusion. This study measures collusion using audit fees that auditors get. It is suggested that auditors who obtain substantial audit fees have conspired to falsify financial report data. The significant rise in audit fees is reflected in the higher expenses incurred in persuading auditors to commit fraud. In addition, accepting a high audit nominal is believed to undermine the auditor's neutrality and independence. When management intentionally charges high audit fees, there is also a greater chance of encountering conflicts of interest. Due to the possibility of cooperation between the auditor and the entity's management, WBS is believed to be able to reduce the likelihood that FSF may occur. Anyone can come forward with information to report suspected collusion, which can cast questions on whether the intended collusive activity will proceed. The WBS implementation process negatively impacts the likelihood of fraud (Handayani et al., 2023).

**H12:** *Whistleblowing System Weakens Collusion on FSF*



**Diagram 3.** Conceptual Framework (2023)

## Method

### Population and Sample

The Ministry of State-Owned Enterprises of the Republic of Indonesia (Kementerian BUMN RI), Indonesian Stock Exchange (IDX), and information comprising a list of BUMN made public by several news portals were among the sources from which the research population was gathered. The population collected produced 120 observation data during 2019-2022. The data shown is the outcome of a multiple-factor purposive sampling procedure. Secondary data was collected from annual and financial reports available on the official IDX website or each company's website. Firms with legal status as public companies and whistleblower system procedures will come next.

### Variable Operational Definition

**Table 1.** Variable Measurement

Variables	Description	Source
Financial Target	The Return on Assets (ROA) rate is used to gauge pressure and determine how a defined financial target affects FSF.  $ROA = \frac{Net\ Profit}{Total\ Assets} \times 100\%$	(Skousen & Smith, 2009)
Ineffective Monitoring	The number of independent boards of commissioners compared to the total board of commissioners is used to measure the supervisory ability of an entity by:  $BDOUT = \frac{Independent\ commissioners}{Total\ commissioners} \times 100\%$	(Skousen & Smith, 2009)
Auditors Change	Determine the annual occurrence of auditor changes between 2019–2022 reporting year. This variable is measured using dummy variables, of which 1 means change, and 0 means no change.	(Skousen & Smith, 2009)
Directors Change	CEO changes occur with every Annual Report reporting edition. This variable is measured using dummy variables, which have one meaning change and 0 meaning no change.	(Wolfe & Hermanson, 2004)
Number of CEO's Picture	Frequent number of CEO photos in an edition of the annual report	(Crowe, 2011)
Auditor's Fees	Fees are paid to auditors to complete the audit process in each reporting year. The natural logarithm (Ln) calculates the auditor's fee number.	(Aviantara, 2021)
Whistleblowing System	WBS indicators that must be adopted in a corporation were released by the Komite Nasional Kebijakan Governance (KNKG). Compliance with KNKG guidelines on WBS is measured by:  $WBS = \frac{Number\ of\ WBS\ items\ applied}{number\ of\ WBS\ items\ according\ to\ KNKG} \times 100\%$	(KNKG, 2008)

---

Financial Statement Fraud	M-Score Beneish's model measures several ratios to assess the percentage risk of fraud using a formula. The dummy variable determines the status of fraud in an entity, one if M-Score > -1.78; 0 if M-Score < -1.78	(Beneish et al., 1999)
---------------------------	--	------------------------

---

This research examines the relationship between pressure, opportunity, rationalization, capability, ego, and collusion in financial statement fraud. This research places the WBS as a moderator of the fraud hexagon theory variable. WarpPLS version 7.0 was the processing tool utilized in this study for data processing and hypothesis testing. Due to its ability to handle data flexibility from normality assumptions, WarpPLS is a popular choice for data processing and analysis (Ghazali & Latan, 2015). In addition, Hair et al. (2014) reveal that PLS is appropriate to reduce data by determining the minimum number of factors needed to calculate the maximum proportion of the total variance represented. This study combines classical assumption tests with multiple linear regression approaches to determine the link between the variables used. The Beneish M-Score is used in this study's measurement of the independent variable. According to research by Ezrien et al. (2016), the Beneish M-Score has an 82% number, indicating its reliability in identifying FSF in Malaysian enterprises.

Additionally, when the conservatism of the total score gets higher, the model becomes more trustworthy in identifying potential manipulators from non-manipulators. In addition to identifying FSF, the Beneish M-Score may identify the behaviors of fraudsters (Anh & Linh, 2016). The Financial Statement Fraud variable, using the following formula:

$$M - Score = -4.840 + (0.92 \times DSRI) + (0.528 \times GMI) + (0.404 \times AQI) + (0.892 \times SGI) + (0.115 \times DEPI) - (0.172 \times SGAI) - (0.327 \times LVGI) + (4.697 \times TATA)$$

## Result and Discussion

Several conclusions can be drawn from the data in Table 2. It was discovered that, out of all the SOEs examined, the most excellent ROA value—which was intended to represent the pressure variable—reached 88%. When contrasted with the average of all SOE entities in the data, which was only 3.4%, this condition is noticeably opposite. The lowest number on the opportunity variable, which uses the ratio measurement between the number of an independent Board of commissioners compared to the total members of the board of Commissioners, is zero. The findings of data processing on the rationalization and capability variables, which were represented by the replacement of directors and accounting firms (AF), revealed the same values. The average values are merely 0.233 and 0.275, showing relatively little AF and director turnover in the SOE environment. The data collection process revealed many CEO picture appearances and audit fees, indicators of collaboration and ego.

In contrast to the amount of audit fees, it is still possible to say that CEOs' average number of picture appearances is under control. The average recorded audit fee attained nearly the maximum amount, which was 21,733. Table 4 also shows the WBS compliance numbers with the KNKG standards. There are already SOEs that adhere strictly to the WBS's implementation. In addition, with an average application of the rules of 0.852, the degree of conformity with KNKG guidelines can also be categorized as outstanding.

The average measurement result using the Beneish M-Score for the fraud rate in SOE is 0.15, which is an inadequate rate.

Table 2 reveals that the income returns of the many SOE entities are unequal. Furthermore, our findings demonstrate that every SOE experiences distinct and noteworthy pressures on one another. Table 4 also shows that there is a SOE that, during a reporting year, does not have any independent commissioner. Most SOEs in Indonesia have opened accounts with the Indonesian Stock Exchange (IDX). IDX member entities must appoint at least one independent commissioner by [POJK No. 57/POJK.04/2017](#) Recognizing Governance. These findings show that specific organizations have disregarded regulations, which may have weakened their controls. Descriptive statistics about the capability and rationalization variables demonstrate the delayed turnover of directors and AF in BUMN companies. This may point to a sound conclusion—that the board of directors, its operational plan, and AF, through its auditing system, have shown high performance and trust. The directors' and AF's comprehension of the operations of the associated SOEs will also grow. This could raise the value of the output that AF and the directors perform. Control, however, might also be weakened by a low level of AF and director turnover. The likelihood of deception increases with the length of the directors' and AF's association with an enterprise.

**Table 2.** Descriptive Statistics

Variables	N	Min	Max	Mean	SD
Pressure	120	-0.58	0.88	0.034	0.158
Opportunity	120	0	0.7	0.381	0.167
Rationalization	120	0	1	0.233	0.425
Capability	120	0	1	0.275	0.448
Ego	120	2	39	11.108	6.622
Collusion	120	0	24.98	21.733	2.431
Whistleblowing System	120	0.38	1	0.852	0.165
Financial Statement Fraud	120	0	1	0.15	0.359

Source: Secondary Data Processing (2023)

The audit fee represents the conclusion variable, and the average value of this statistic is almost equal to the highest number. According to these statistics, BUMN in Indonesia has a significant capacity for earning revenue and paying costs for the auditing process. The performance of the AF chosen by the organization will also be expected to be improved by audit fees. However, the situation will become challenging if the audit fee is enormous. Large quantities could pose a danger to the objectivity and independence of AF. Table 5 displays the findings from a fit model test utilizing gathered secondary data. WarpPLS 7.0 is then used to process and analyze the data. Modeling the link between the variables under study using the data processing findings is good. The model satisfies all research criteria, as shown by the model fitting results and quality index in Table 5, making it appropriate for use in population description.

**Table 3.** Model Fit

Model Fit and Quality Indices	Index	Result
Average R-Squared (ARS)	0.025	Fit Model
Average Block VIF (AVIF)	1.728	Fit Model
Average Full Collinearity VIF (AFCVIF)	1.716	Fit Model

Tennenhaus GoF (TGoF)	0.381	Large
Sympson’s Paradox Ratio (SPR)	0.833	Fit Model
R-squared Contribution Ratio (RSCR)	0.975	Fit Model
Nonlinear Bivariate Causality Direction Ratio (NBCDR)	1	Fit Model

Source: Secondary Data Processing (2023)

## Discussion

**Table 4.** Test Results

Variables	Path Coefficient	$\beta$	Sig.
Pressure on FSF	-0.296	0.085	0.001
Opportunity on FSF	-0.064	0.900	0.240
Rationalization on FSF	-0.094	0.089	0.146
Capability on FSF	-0.008	0.091	0.467
Ego on FSF	-0.008	0.091	0.465
Collusion on FSF	-0.080	0.089	0.185
WBS Weakens Pressure on FSF	0.154	0.088	0.041
WBS Weakens Opportunity on FSF	0.126	0.088	0.078
WBS Weakens Rationalization on FSF	0.110	0.089	0.110
WBS Weakens Capability on FSF	0.107	0.089	0.115
WBS Weakens Ego on FSF	-0.143	0.088	0.054
WBS Weakens Collusion on FSF	-0.098	0.089	0.137

### Pressure on Financial Statement Fraud

Considering the significance of pressure is 0.001, which is less than 0.05, H1 is accepted. These findings clarify that the likelihood of FSF occurring increases with the size of the financial performance target that needs to be met. According to Fauziah (2022), financial targets are increasing annually, meaning that failure to meet them will significantly impact the likelihood of FSF occurring. The findings of this study are consistent with those of Chantia et al. (2021), who found that low revenue collection targets may cause high FSF levels. The same findings as Faradiza (2019) and Handayani et al. (2022) contend that managers will typically be pragmatic in achieving the goals that have been stated. Window dressing usually takes the form of income smoothing or earnings management. The modification that has been done will undoubtedly cause changes in the income shown in the financial statements. These findings contradict the findings of Indrati and Claraswati's (2021) research, which indicates that the organization is concentrating on improving performance quality in addition to profit.

### Opportunity on Financial Statement Fraud

Considering the significance of opportunity is 0.24, which is more significant than 0.05, H2 is rejected. These findings clarify that one of the factors contributing to FSF is ineffective monitoring. These findings are consistent with the study conducted by Achmad et al. (2022), which found that the low FSF correlates with the low level of supervision they receive. Fraud can be avoided in addition to being found through monitoring. Entities can handle FSF more quickly if they practice good corporate Governance, which includes implementing clear SOPs, disclosing information, and conducting regular reporting and review. Only the proper and organized execution of the work's mechanics may be guaranteed by supervision. Similar findings to this studies are reported by Aulia Haqq and Budiwitjaksono (2020) and Jannah and

Rasuli (2021), who show that the quality—rather than the quantity—of supervision provided by impartial commissioners determines whether it is strong or weak. The study's findings also support the research put forth by Hadiani et al. (2022), although they contradict the conclusions of Hashim et al. (2020).

#### **Rationalization of Financial Statement Fraud**

Considering the significance of rationalization on FSF is 0.146, which is greater than 0.05, H3 is rejected. These findings indicate no correlation between the occurrence of FSF and changing auditors. These findings are consistent with studies by Khamainy et al. (2022), who contend that the new auditor did not eliminate the prior auditor's fraud discoveries. Generally, auditors are changed to conform to Indonesia's current regulations. By OJK Regulation No.13/POJK.03/2017, the Otoritas Jasa Keuangan (OJK) carries out an auditor change policy. The auditee's satisfaction with the auditor's performance may also impact the auditor's decision to change (Imtikhani & Sukirman, 2021). These results support previous research conducted by Sari et al. (2020) but contradict research by Koharudin and Januarti (2021) and Meidijati and Amin (2022).

#### **Capability of Financial Statement Fraud**

Considering the significance of capability on FSF is 0.467, which is greater than 0.05, H4 is rejected. The likelihood of FSF developing in a firm is unaffected by and even unrelated to a change of directors. This study supports the findings of Fitriyah et al. (2021), who contend that director changes at Indonesian SOEs typically occur to enhance the connected entity's performance. In addition, the Indonesian Ministry of State-Owned Enterprises (BUMN) choices impact the director's job rotation policy. The likelihood of fraud arising from unfilled director posts is likewise low. There is no vacancy in the director post due to the arrangements made to change directors. These findings confirm earlier studies by Indrati and Claraswati (2021) and Syahria et al. (2019), which also showed that the ability of the incoming directors is likely to play a role in the decision to replace existing directors.

#### **Ego on Financial Statement Fraud**

Considering the significance of ego on FSF is 0.465, which is greater than 0.05, H5 is rejected. The likelihood that FSF will occur is unaffected by the CEO's picture appearing in every annual report issue. This is a component of the office holders' transparency in all Indonesian SOE entities, including the CEO's portrait in every AR edition to present the company's leader. According to Achmad et al. (2022), the CEO's portrait was included in the AR edition to recognize the CEO's contributions to the organization. Building readers' trust is another goal of the annual report edition's heavy dose of CEO images (Fitriyah et al., 2021). While being categorized as narcissistic, the primary intention of this activity is to instill trust and send a good message (Damayani et al., 2017). These findings confirm earlier studies by Lionardi and Suhartono (2022), Sasongko and Wijyantika (2019).

#### **Collusion on Financial Statement Fraud**

Considering the significance of collusion on FSF is 0.185, more significant than 0.05, H6 is rejected. This demonstrates the minimal impact of auditing fees on the incidence of FSF. The risks that auditors take determine the fees they get paid. This also has to do with the intricacy that auditors deal with, which is why a higher audit charge is necessary. These findings are consistent with the study by Nurhidayah and Kusumawati (2023), who contend that the level of service provided by the auditor in guaranteeing the impartiality of the FR presentation is reflected in the magnitude of the audit fee. Astrawan and Achmad (2023) also highlighted that the approval of the general meeting of shareholders and the audit committee's recommendations typically serve as the foundation for calculating audit fees. These findings



are consistent with a study by [Prasetia and Dewayanto \(2021\)](#), which found that audit fees are ineffective at identifying FSF. This finding contrasts with that of [Aviantara's \(2021\)](#) study, which shows how audit fees affect FSF and increase the likelihood that they may impede the independence and objectivity of the auditor.

#### **WBS Weakens Pressure on Financial Statement Fraud**

Considering the significance of WBS between pressure on FSF is 0.041, which is less than 0.05, H7 is accepted. These findings clarify that WBS can reduce the impact of pressure on FSF. According to [Theotama et al. \(2023\)](#), pressure is an unspoken need for money that keeps the offender's pragmatism rising to meet their demands. Financial targets are used in this study as a proxy for pressure. When goals are not met, the pressure imposed by these expectations pushes management to devise drastic fixes. The best course of action is undoubtedly to manipulate the financial information displayed in the FR. Foreseeing this circumstance will not be possible by only examining the fairness of financial information. It is anticipated that having a WBS will assist organizations in making sure that fraudsters change their minds. WBS can serve as both an early warning system and a detector for fraud risk ([Hanifah & Clyde, 2022](#)). In addition, WBS participants welcome members of the public at all societal levels who would like to report instances of fraud within an organization. Research by [Bunga et al. \(2020\)](#) demonstrated that WBS could stop fraud. WBS is used as a reporting tool and internal performance monitoring tool.

#### **WBS Weakens Opportunity on Financial Statement Fraud**

Considering the significance of WBS between opportunity on FSF is 0.078, which is greater than 0.05, H8 is rejected. WBS cannot moderate the link between opportunity and FSF. In SOE entities, WBS may not be a more effective instrument for fraud monitoring and disclosure than other possibilities. Other approaches include using commissioners as a performance monitoring board and internal audits. The low degree of WBS socialization and training among internal staff members may also contribute to WBS's ineffectiveness as a monitoring tool. According to [ACFE \(2022\)](#), providing staff with training on WBS processes can improve the efficiency of WBS-based fraud detection. The study's findings suggest no discernible difference in the impact of opportunity on FSF depending on whether a WBS is in place.

#### **WBS Weakens Rationalization on Financial Statement Fraud**

Considering the significance of WBS between rationalization on FSF is 0.11, which is greater than 0.05, H9 is rejected. WBS cannot moderate the link between rationalization and FSF. [Vousinas \(2019\)](#) defines rationalization as explaining a fraudulent act. This characteristic originates with each fraudster. Based on this study's findings, WBS cannot weaken this characteristic. WBS does not influence fraudsters' motivations or excuses to justify their activities. It was also believed that the people who committed the crimes needed to receive more training on WBS from the organization in charge of them. This situation is linked to the offenders' low degree of education and may also arise from a potential lack of knowledge about the entity's WBS. A more profound comprehension of WBS can encourage all staff members to refrain from dishonest behavior and boost WBS's efficacy and its ability to avert crises. Staff members won't be motivated to carry out their fraudulent scenarios if they know that the WBS can identify their actions ([Mandal & Amilan, 2023](#)).

#### **WBS Weakens Capability on Financial Statement Fraud**

Considering the significance of WBS between capability on FSF is 0.115, which is greater than 0.05, H10 is rejected. WBS cannot moderate the link between capability and FSF. Managerial staff members typically possess specific capabilities. Accusing officers with exclusive privileges of abusing their authority and skill

to perpetrate fraud is also possible. According to [Rahma and Sari \(2023\)](#), capability refers to fraudsters' knowledge and skills to execute their schemes in a corporate setting. This description is reinforced by Tarmizi et al. (2022) as a variable indicating the likelihood that fraudsters will execute their schemes frequently. The study's findings show that WBS could not reduce FSF's capabilities. This circumstance may arise if the WBS's primary manager or accountable party is a fraudster's management team member.

### **WBS Weakens Ego on Financial Statement Fraud**

Considering the significance of WBS between ego on FSF is 0.054, which is greater than 0.05, H11 is rejected. According to the number of CEO images in the annual report submitted to the FSF, WBS could not regulate the relationship between ego and this metric. CEOs typically display their status by being listed in yearly reports ([Crowe, 2011](#)). Because of the CEO's need to uphold his standing, it is said that his ego has a propensity to commit fraud. WBS could not lessen the impact of ego on FSF using this investigation. The same findings were reported by [Ghozali et al. \(2019\)](#), who claimed that contextual factors impact fraudulent behavior. Information on fraud from the WBS may be managed and influenced by the CEO to stop the WBS from compromising the ego. Being described in this way as having a Machiavellian personality is equivalent to using various strategies to feed its ego, such as undermining or even overthrowing the control structure ([Triantoro et al., 2020a](#)).

### **WBS Weakens Collusion on Financial Statement Fraud**

Considering the significance of WBS between collusion on FSF is 0.137, which is greater than 0.05, H12 is rejected. The relationship between collusion and FSF, as determined by the audit fees paid to the auditor, cannot be moderated by WBS. Two elements of WBS that come from various environments are found to weaken the occurrence of collusion. Triantoro et al. (2020) state that WBS is an internal control technique designed to promote sound corporate Governance. Examiners from outside the organization are known as external auditors, on the other hand. According to [Srikandhi and Suryandari \(2020\)](#), WBS can facilitate auditors' efforts in identifying FSF occurrences. [Ulimsyah et al. \(2021\)](#) also showed that WBS can support investigative auditors in their tasks. However, WBS has nothing to do with the influence of collaboration in the FSF and the continuing audit process.

## **Conclusion and Recommendation**

Due to the growing proficiency of fraudsters, all organizations must enhance their control mechanisms. Special units are not sufficient to lower the likelihood of fraud. Both the general public and employee personnel must participate. The WBS program was introduced to make reporting infractions or instances of fraud easier. One monitoring technique alone may not be sufficient to protect an organization against the risk of fraud cases occurring there. According to this study, opportunity, rationality, capability, ego, and collusion do not affect FSF, but pressure does. WBS did not weaken the link between opportunity, rationalization, capability, ego, and collusion with FSF. However, the WBS successfully reduced the correlation between pressure on the FSF. This study also shows that the FSF, motivated by the offenders' financial requirements, frequently threatens SOE in Indonesia. WBS control is likewise insignificant in impacting the likelihood of fraud in SOE. This study's weaknesses relate to how several variables, including capability and rationalization, were measured. In the future, researchers should develop measures that could offer a more thorough explanation of the relationship to FSF, such as conspiracy, quantified by an entity's political connections. Future researchers can also utilize the F-Score to measure the FSF variable and generate various outcomes. Since fraud does not only happen in the BUMN sector, the study goal must also look at other sectors to present the most recent findings regarding the subjects covered.

## References

- Association of Certified Fraud Examiners. (2020). Report to the Nations 2020.
- Association of Fraud Certified Examiners. (2022). ACFE 2022 Report to the Nations.
- ACFE Indonesia. (2019). Survei Fraud Indonesia 2019.
- Achmad, T., Ghozali, I., & Pamungkas, I. D. (2022). Hexagon Fraud: Detection of Fraudulent Financial Reporting in State-Owned Enterprises Indonesia. *Economies*, 10(1). <https://doi.org/10.3390/economies10010013>
- Agustina, R. D., & Pratomo, D. (2019). Pengaruh Fraud Pentagon dalam Mendeteksi Kecurangan Pelaporan Keuangan. *Jurnal Ilmiah Manajemen Ekonomi Dan Akuntansi*, 3(1).
- Akbar, D. A., Africano, F., & Isrodinata, R. (2021). Can Fraud Diamond Affect Fraud Financial Statements in Sharia Commercial Banks? *Jurnal Reviu Akuntansi Dan Keuangan*, 11(1), 40–57. <https://doi.org/10.22219/jrak.v11i1.16256>
- Amyar, F., Rahma, A. E., Alimin Azis, N., & Suwarno, S. (2023). The Effect of Auditor's Professional Skepticism and Whistleblowing System on Fraud Detection: Evidence from Indonesian Public Sector Audit (Vol. 3, Issue 4).
- Anh, N. H., & Linh, N. H. (2016). Using the M-score Model in Detecting Earnings Management: Evidence from Non-Financial Vietnamese Listed Companies. *VNU Journal of Science: Economics and Business*, 32(2), 14–23.
- Anisykurlillah, I., Ardiansah, M. N., & Nurrahmasari, A. (2023). Fraudulent Financial Statements Detection Using Fraud Triangle Analysis: Institutional Ownership as A Moderating Variable. *Accounting Analysis Journal*, 11(2), 138–148. <https://doi.org/10.15294/aa.v11i2.57517>
- Ariyanto, R., & Bone, H. (2020). Fraud Awareness in Indonesian Governmental Sector: Multi-Agency Responses. *Review of Integrative Business and Economics Research*, 9(2), 209–222.
- Asmah, A. E., Atuilik, W. A., & Ofori, D. (2020). Antecedents and consequences of staff-related fraud in the Ghanaian banking industry. *Journal of Financial Crime*, 27(1), 188–201. <https://doi.org/10.1108/JFC-03-2019-0034>
- Astrawan, M. I., & Achmad, T. (2023). Pengaruh Efektivitas Auditor Spesialisasi Industri, Fee Audit, dan Komite Audit terhadap Pendeteksian Kecurangan Pelaporan Keuangan. *Diponegoro Journal of Accounting*, 12(2), 1–14.
- Aulia Haqq, A. P. N., & Budiwitjaksono, G. S. (2020). Analisa teori fraud pentagon sebagai pendeteksi kecurangan pada laporan keuangan. *Journal of Economics, Business, & Accountancy Ventura*, 22(3). <https://doi.org/10.14414/jebav.v22i3.1788>
- Aviantara, R. (2021). The Association Between Fraud Hexagon and Government's Fraudulent Financial Report. *Asia Pacific Fraud Journal*, 6(1), 26. <https://doi.org/10.21532/apfjournal.v6i1.192>
- Avortri, C., & Agbanyo, R. (2021). Determinants of management fraud in the banking sector of Ghana: the perspective of the diamond fraud theory. *Journal of Financial Crime*, 28(1), 142–155. <https://doi.org/10.1108/JFC-06-2020-0102>
- Bagianto, A., & Hendriyana, H. (2021). Understand the Role of Whistleblowing Systems and Internal Audits on Fraud Prevention. *JASa (Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi)*, 5(3), 374–384. <https://doi.org/10.36555/jasa.v5i3.1733>
- Beneish, M. D., Bernard, V., Ciesielski, J., Deangelo, L., Fridson, M., Harvey, C., Hsieh, D., Lee, C., Press, E., Whaley, B., & Zmijewski, M. (1999). The Detection of Earnings Manipulation Comments Welcome.
- Bhaktiar, R. E., & Setyorini, A. (2021). The Effect of the Fraud Triangle on Fraud Financial Statements (Case Study on Manufacturing Companies in the Food and Beverage Subsector). *Jurnal Mantik*, 5(2), 841–847.
- Bunga, R. A., Rafael, S. J. M., Dethan, M. A., & Arthana, I. K. (2020). Whistleblowing Systems And Competence Of Internal Auditor For Fraud Prevention. *International Journal Of Scientific & Technology Research*, 9(2), 2. [www.ijstr.org](http://www.ijstr.org)
- Chantia, D., Guritno, Y., & Sari, R. (2021). Detection Of Fraudulent Financial Statements : Fraud Hexagon S.C.C.O.R.E Model Approach. *Prosiding BIEMA*, 2, 594–613.

- Citranagari, M. P. (2023). The Effect Of Professional Skepticism, Experience Of Investigative Auditors And Whistleblowing System On Auditor's Ability In Detecting Fraud. *Journal Research of Social Science, Economics, and Management*, 2(1), 72–82. <https://doi.org/10.36418/jrssem.v2i1.219>
- Cressey, D. R. (1953). *Other People's Money; A Study of the Social Psychology of Embezzlement*.
- Crowe, H. (2011). *Why the Fraud Triangle is No Longer Enough*. Crowe LLP.
- Damayani, F., Wahyudi, T., & Yuniatie, E. (2017). Pengaruh Fraud Pentagon Terhadap Kecurangan Laporan Keuangan Pada Perusahaan Infrastruktur Yang Terdaftar Di Bursa Efek Indonesia Tahun. *Akuntabilitas: Jurnal Penelitian Dan Pengembangan Akuntansi*, 11(2).
- Dihni, V. A. (2022a, March 28). Ada 119 Kasus Korupsi di BUMN Periode 2016-2021. Databoks.
- Dihni, V. A. (2022b, March 28). Ini Kelompok Pelaku Korupsi di Lingkungan BUMN. Databoks.
- Ezrien, M., Kamal, M., Fairuz, M., Salleh, M., & Ahmad, A. (2016). Detecting Financial Statement Fraud by Malaysian Public Listed Companies: The Reliability of the Beneish M-Score Model (Menganalisis Penipuan Penyata Kewangan oleh Syarikat Tersenarai di Bursa Malaysia: Keberkesanan Model Beneish M-Score). *Jurnal Pengurusan*, 46, 23–32.
- Faradiza, S. A. (2019). Fraud Pentagon dan Kecurangan Laporan Keuangan. *EkBis: Jurnal Ekonomi Dan Bisnis*, 2(1), 1–22.
- Fathmaningrum, E. S., & Anggarani, G. (2021). Fraud Pentagon and Fraudulent Financial Reporting: Evidence from Manufacturing Companies in Indonesia and Malaysia. *Journal of Accounting and Investment*, 22(3), 625–646. <https://doi.org/10.18196/jai.v22i3.12538>
- Fauziah, F. E. (2022). Financial Statement Fraud Detection with Fraud Triangle Analysis Triangle Analysis. *FOKUS EKONOMI: Jurnal Ilmiah Ekonomi*, 17(2). <http://ejournal.stiepena.ac.id/index.php/fe>
- 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.
- Fitriyah, atul, Novita, S., Airlangga, J., Gubeng, K., Surabaya, K., & Riset Akuntansi Kontemporer, J. (2021). Fraud Pentagon Theory for Detecting Financial Statement Fraudulent. 13(1), 20–25. <https://journal.unpas.ac.id/index.php/jrak/index>
- Ghaisani, H. M., Triyono, & Bawono, A. D. B. (2022). Analysis of Financial Statement Fraud: The Vousinas Fraud Hexagon Model Approach and the Audit Committe as Moderating Variable. *The International Journal of Business Management and Technology*, 6(6). [www.theijbmt.com](http://www.theijbmt.com)
- Ghazali, I., & Latan, H. (2015). *Partial Least Squares: Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0 untuk Penelitian Empiris*. Badan Penerbit UNDIP.
- Ghozali, I., Achmad, T., & Pamungkas, I. D. (2019). Determinants Of Fraudulent Financial Reporting And Whistleblowing System: Applying Theory Of Planned Behavior. *WSEAS TRANSACTIONS on BUSINESS and ECONOMICS*, 16.
- Hadiani, Y., Rizani, F., & Nailiah, R. (2022). Mekanisme Corporate Governance Sebagai Variabel Moderator Dalam Potensi Kecurangan Laporan Keuangan. *Students' Conference on Accounting & Business*.
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Handayani, J. R., Nurcahyono, N., Saadah, N., & Winarsih. (2023). Hexagon Fraud: Detection of Fraudulent Financial Statement in Indonesia (pp. 263–276). [https://doi.org/10.2991/978-94-6463-154-8\\_24](https://doi.org/10.2991/978-94-6463-154-8_24)
- Handayani, N., Evana, E., & Prasetyo, T. J. (2022). Determination of Fraudulent Financial Statements in Indonesia. *Journal Dimensie Management and Public Sector*, 3(2), 1–10. <https://hdpublication.com/index.php/jdmps>
- Handoko, B. L., Putri, R. N. A., & Wijaya, S. (2022). Analysis of Fraudulent Financial Reporting based on the Fraud Heptagon Model in the Transportation and Logistic Industry listed on IDX during the Covid-19 Pandemic. *ACM International Conference Proceeding Series*, 56–63. <https://doi.org/10.1145/3578997.3579003>
- Hanifah, I. A., & Clyde, V. (2022). The Effect of Whistleblowing System toward Fraud Prevention: Mediation of Forensic and Investigative Audit. *AFRE (Accounting and Financial Review)*, 5(2), 97–105. <https://doi.org/10.26905/afr.v5i2.7530>

- Hashim, H. A., Salleh, Z., Shuhaimi, I., & Ismail, N. A. N. (2020). The risk of financial fraud: a management perspective. *Journal of Financial Crime*, 27(4), 1143–1159. <https://doi.org/10.1108/JFC-04-2020-0062>
- Hermansjah, R., Sugiarto, Ugut, G. S. S., & Hulu, E. (2021). The effect of government ownership on Indonesia's state-owned enterprises (SOE) firm performance. *Accounting*, 7(6), 1347–1352. <https://doi.org/10.5267/j.ac.2021.4.003>
- Hidayati, N. (2019, June 29). Ditemukan Pelanggaran pada Audit Laporan Keuangan Garuda, Izin AP Kasner Sirumapea Dibekukan. Pusat Pembinaan Profesi Keuangan.
- Idris, M. (2021, February 3). Ini Kronologi Korupsi Asabri yang Merugikan Negara Rp 23,7 Triliun. *Kompas.Com*.
- Intikhani, L., & Sukirman. (2021). Determinan Fraudulent Financial Statement Melalui Perspektif Fraud Hexagon Theory Pada Perusahaan Pertambangan. *Jurnal Akuntansi Bisnis*, 19(1).
- Indrati, M., & Claraswati, N. (2021). Financial Statement Detection Using Fraud Diamond. *Journal Research of Social, Science, Economics, and Management*, 1(2), 148–162. <https://doi.org/10.36418/jrssem.v1i2.13>
- Jannah, V. M., & Rasuli, M. (2021). Pendekatan Vousinas Fraud Hexagon Model dalam Mendeteksi Kecurangan Pelaporan Keuangan. *Studi Akuntansi Dan Keuangan Indonesia*, 4(1).
- Khamainy, A. H., Amalia, M. M., Cakranegara, P. A., & Indrawati, A. (2022). Financial Statement Fraud: The Predictive Relevance of Fraud Hexagon Theory. *Journal of Accounting and Strategic Finance*, 5(1), 110–133. <https://doi.org/10.33005/jasf.v5i1.249>
- KNKG. (2008). Pedoman Sistem Pelaporan Pelanggaran - SPP (Whistleblowing System - WBS). [www.governance-indonesia.com](http://www.governance-indonesia.com)
- Koharudin, A., & Januarti, I. (2021). Lack of Financial Reporting Using Crowe's Fraud Pentagon Theory. *Jurnal Dinamika Akuntansi*, 13(2), 148–157. <https://doi.org/10.15294/jda.v13i2.28602>
- Le, T. T. H., & Tran, M. D. (2018). The effect of internal control on asset misappropriation: The case of Vietnam. *Business and Economic Horizons*, 14(4), 941–953. <https://doi.org/10.15208/beh.2018.64>
- Lionardi, M., & Suhartono, S. (2022). Pendeteksian Kemungkinan Terjadinya Fraudulent Financial Statement menggunakan Fraud Hexagon. *Moneter: Jurnal Akuntansi Dan Keuangan*, 9(1). <http://ejournal.bsi.ac.id/ejurnal/index.php/moneter>
- Maisaroh, P., & Nurhidayati, M. (2021). Pengaruh Komite Audit, Good Corporate Governance Dan Whistleblowing System Terhadap Fraud Bank Umum Syariah Di Indonesia Periode 2016-2019. *Journal of Islamic Banking and Finance*, 1(1), 23–36.
- Makhmuro, A., & Nurcahya, Y. A. (2023). Literature Review of Audit Investigation Role and Whistleblowing System in Efforts to Fraud Disclosure. *Current Advanced Research on Sharia Finance and Economics Worldwide*, 2(2). <https://ojs.transpublika.com/index.php/CASHFLOW/>
- Mandal, A., & Amilan, S. (2023). Preventing financial statement fraud in the corporate sector: insights from auditors. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-02-2023-0101>
- Masdiantini, P. R., Devi, S., Purnamawati, I. G. A., & Dewi, P. E. D. M. (2021). Detection of Financial Statement Fraud: In Review of Bystander Effect, Whistleblowing and Locus of Control. *Advances in Economics, Business, and Management Research*, 197.
- Maulida, W. Y., & Bayunitri, B. I. (2021). The influence of whistleblowing system toward fraud prevention. *International Journal of Financial, Accounting, and Management*, 2(4), 275–294. <https://doi.org/10.35912/ijfam.v2i4.177>
- Meidijati, & Amin, M. N. (2022). Detecting Fraudulent Financial Reporting Through Hexagon Fraud Model: Moderating Role of Income Tax Rate. *International Journal Of Social And Management Studies (Ijosmas)*, 3(2). <http://www.ijosmas.org>
- Meiryani, Daniel, Huang, S. M., Lindawati, A., Wahyuningtias, D., Purnomo, A., Winoto, A., & Fahlevi, M. (2023). Systematic Literature Review On Implementation Of Whistleblowing System In Preventing Financial Accounting Fraud. *Journal of Theoretical and Applied Information Technology*, 15(9). [www.jatit.org](http://www.jatit.org)
- Mukaromah, I., & Budiwitjaksono, G. S. (2021). Fraud Hexagon Theory dalam Mendeteksi Kecurangan Laporan Keuangan pada Perbankan yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2019. *Jurnal Ilmiah Komputerisasi Akuntansi*, 14(1), 61–72. <http://journal.stekom.ac.id/index.php/kompak> page61

- Mukhtaruddin, M., Chairunnisa, W. Z., Patmawati, P., & Saftiana, Y. (2022). Financial distress, earning management, financial statement fraud and audit quality as a moderating variable: listed companies on the Indonesia Stock Exchange. *F1000Research*, 11, 1362. <https://doi.org/10.12688/f1000research.123525.1>
- Mulya, A., Rahmatika, D. N., & Kartikasari, M. D. (2019). Pengaruh Fraud Pentagon (Pressure, Opportunity, Rationalization, Competence Dan Arrogance) Terhadap Pendeteksian Fraudulent Financial Statement Pada Perusahaan Property, Real Estate And Building Construction Yang Terdaftar Di Bursa Efek Indonesia Tahun 2014-2018 *Akuntansi Keuangan*. *Pernana: Jurnal Perpajakan, Manajemen, Dan Akuntansi*, 11(1).
- Nasir, N. A. B. M., Ali, M. J., & Ahmed, K. (2019). Corporate Governance, board ethnicity, and financial statement fraud: evidence from Malaysia. *Accounting Research Journal*, 32(3), 514–531. <https://doi.org/10.1108/ARJ-02-2018-0024>
- Nugroho, A. (2020, January 10). Rugi Triliunan, Berikut Kronologi Kasus Asuransi Jiwasraya. *Kompas*.
- Nugroho, D., & Diyanty, V. (2022). Hexagon Fraud In Fraudulent Financial Statements: The Moderating Role Of Audit Committee. *Jurnal Akuntansi Dan Keuangan Indonesia*, 19(1), 46–67. <https://doi.org/10.21002/jaki.2022.03>
- Nurhidayah, W., & Kusumawati, E. (2023). Analisis Kecurangan Laporan Keuangan Dengan Pendekatan Vousinas Fraud Hexagon Model. *INNOVATIVE: Journal Of Social Science Research*, 3(4), 8789–8804.
- Nurhidayat, I., & Kusumasari, B. (2018). Strengthening the Effectiveness of Whistleblowing: System A Study for Implementing Anti-corruption Policy in Indonesia. *Journal of Financial Crime*, 25(1), 140–154. <https://doi.org/10.1108/JFC-11-2016-0069>
- Okafor, O. N., Adebisi, F. A., Opara, M., & Okafor, C. B. (2020). Deployment of whistleblowing as an accountability mechanism to curb corruption and fraud in a developing democracy. *Accounting, Auditing and Accountability Journal*, 33(6), 1335–1366. <https://doi.org/10.1108/AAAJ-12-2018-3780>
- Oktavia, S., Bahari, A., & Kartika, R. (2022). Pengaruh Elemen Fraud Hexagon Theory Terhadap Fraud Laporan Keuangan. *Jurnal Akuntansi Dan Ekonomika*, 12(2), 275–284. <https://doi.org/10.37859/jae.v12i2.4207>
- Owusu, G. M. Y., Koomson, T. A. A., Alipoe, S. A., & Kani, Y. A. (2022). Examining the predictors of fraud in state-owned enterprises: applying the fraud triangle theory. *Journal of Money Laundering Control*, 25(2), 427–444. <https://doi.org/10.1108/JMLC-05-2021-0053>
- Ozcelik, H. (2020). An Analysis Of Fraudulent Financial Reporting Using The Fraud Diamond Theory Perspective: An Empirical Study On The Manufacturing Sector Companies Listed On The Borsa Istanbul. In *Contemporary Studies in Economic and Financial Analysis* (Vol. 102, pp. 131–153). Emerald Group Holdings Ltd. <https://doi.org/10.1108/S1569-375920200000102012>
- Pamungkas, I. D., Wahyudi, S., & Achmad, T. (2020). Whistleblowing System and Fraud Early Warning System on Village Fund Fraud: The Indonesian Experience. *International Journal of Environmental Science*, 5. <http://www.iaras.org/iaras/journals/ijes>
- POJK No. 57/POJK.04/2017, Pub. L. No. 57/POJK.04/2017 (2017).
- Prasetya, I. Y., & Dewayanto, T. (2021). Analisis Pengaruh Fraud Diamond dan Fee Audit terhadap Pengungkapan atas Kecurangan Laporan Keuangan. *Diponegoro Journal on Accounting*, 10(4), 1–15.
- Primayogha, E. (2022, March 21). Kasus Korupsi di Lingkungan BUMN: Marak dan Rawan pada Sektor Finansial. *Indonesia Corruption Watch*.
- Puryati, D., & Febriani, S. (2020). The Consequence of Whistleblowing System and Internal Control toward Fraud Prevention: A Study on Indonesian State Owned Enterprise. *International Journal of Business and Technology Management*, 2(3), 35–48. <http://myjms.moe.gov.my/index.php/ijbtm>
- Putri, R. S. (2022, August 5). Kasus Kredit Fiktif Rp 2,2 Miliar di Bogor, BRI Berkoordinasi dengan Penegak Hukum dan Jatuhkan Sanksi. *TEMPO.CO*.
- Rachman, F. F. (2020, January 8). Begini Kronologi Kasus Jiwasraya Versi BPK. *Detikfinance*.
- Rahma, N. N., & Sari, S. P. (2023). Detection of Fraud Financial Statements through the Hexagon Model Vousinas Fraud Dimensions: Review on Jakarta Islamic Index 70. *International Journal of Latest Research in Humanities and Social Science*, 6(1), 152–159. [www.ijlrhss.com](http://www.ijlrhss.com)



- Rani, U., Lhaksmi Pramudyastuti, O., & Prativi Nugraheni, A. (2022). Disclosing the practice of whistleblowing system in Indonesia's publicly listed companies. *Keuangan Dan Manajemen*, 18(18), 80. <https://doi.org/10.29264/jinv.v18i0.11241>
- Ratnasari, E., & Solikhah, B. (2019). Analysis of Fraudulent Financial Statement: The Fraud Pentagon Theory Approach Analisis Kecurangan Laporan Keuangan: Pendekatan Fraud Pentagon Theory. *Gorontalo Accounting Journal*, 2(2), 98–112.
- Reurink, A. (2018). Financial Fraud: A Literature Review. *Journal of Economic Surveys*, 32(5), 1292–1325. <https://doi.org/10.1111/joes.12294>
- Sagala, S. G., & Siagian, V. (2021). Pengaruh Fraud Hexagon Model Terhadap Fraudulent Laporan Keuangan pada Perusahaan Sub Sektor Makanan dan Minuman yang Terdaftar di BEI Tahun 2016-2019. *Jurnal Akuntansi*, 13(2).
- Sari, M. P., Kiswanto, Rahmadani, L. V., Khairunnisa, H., & Pamungkas, I. D. (2020). Detection of Fraudulent Financial Reporting And Corporate Governance Mechanisms Using Fraud Diamond Theory Of The Property And Construction Sectors In Indonesia. *Humanities & Social Sciences Reviews*, 8(3), 1065–1072. <https://doi.org/10.18510/hssr.2020.83109>
- Sasongko, N., & Wijyantika, S. F. (2019). Faktor Resiko Fraud Terhadap Pelaksanaan Fraudulent Financial Reporting (Berdasarkan Pendekatan Crown's Fraud Pentagon Theory). *Riset Akuntansi Dan Keuangan Indonesia*, 4(1).
- Septiningrum, K. E., & Mutmainah, S. (2022). Analisis Faktor Yang Mempengaruhi Terjadinya Financial Statement Fraud: Perspektif Fraud Hexagon Theory. *Diponegoro Journal Of Accounting*, 11(3), 1–13. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Septriani, Y., & Handayani, D. (2018). Mendeteksi Kecurangan Laporan Keuangan dengan Analisis Fraud Pentagon. *Jurnal Politeknik Caltex Riau*, 11(1), 11–23. <http://jurnal.pcr.ac.id>
- Sidik, S. (2021, March 4). Megaskandal Asabri Rp 23 T, Korupsi Terbesar dalam Sejarah RI. *CNBC Indonesia*.
- Sihombing, T., & Panggulu, G. E. (2022). Fraud Hexagon Theory And Fraudulent Financial Statement In IT Industry In Asean. *Jurnal Reviu Akuntansi Dan Keuangan*, 12(3), 524–544. <https://doi.org/10.22219/jrak.v12i3.23334>
- Siregar, E. S., Sari, G., & Arsa, A. (2022). Fraud at Islamic Commercial Banks in Indonesia is Seen in Good Corporate Governance (GCG) and a Whistleblowing System. *MALIA: Journal of Islamic Banking and Finance*, 6(2), 117. <https://doi.org/10.21043/malia.v6i2.14627>
- Situngkir, N. C., & Triyanto, D. N. (2020). Detecting Fraudulent Financial Reporting Using Fraud Score Model and Fraud Pentagon Theory : Empirical Study of Companies Listed in the LQ 45 Index. *The Indonesian Journal of Accounting Research*, 23(03). <https://doi.org/10.33312/ijar.486>
- Skousen, C. J., & Smith, K. R. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. *Advances in Financial Economics*, 13, 53–81. [https://doi.org/10.1108/S1569-3732\(2009\)0000013005](https://doi.org/10.1108/S1569-3732(2009)0000013005)
- Sow, A. N., Basiruddin, R., Mohammad, J., & Rasid, S. Z. A. (2018). Fraud prevention in Malaysian small and medium enterprises (SMEs). *Journal of Financial Crime*, 25(2), 499–517. <https://doi.org/10.1108/JFC-05-2017-0049>
- Srikandhi, M. F., & Suryandari, D. (2020). Accounting Analysis Journal Audit Quality Moderates the Effect of Independent Commissioners, Audit Committees, and Whistleblowing Systems on the Integrity of Financial Statements. *Accounting Analysis Journal*, 9(3), 186–192. <https://doi.org/10.15294/aaj.v9i3.41625>
- Sudjono, A. C. (2023). Do Good Corporate Governance and Whistleblowing Systems in the Bank Industry Effectively Support Fraud Detection and Prevention? *Asia Pacific Fraud Journal*, 8(1), 155. <https://doi.org/10.21532/apfjournal.v8i1.296>
- Sunardi, & Amin, S. N. (2018). Fraud Detection of Financial Statement by Using Fraud Diamond Perspective. *International Journal of Development and Sustainability*, 7(3), 878–891. [www.isdsnet.com/ijds](http://www.isdsnet.com/ijds)
- Susandra, F., & Hartina, S. (2017). Analisis Faktor-Faktor Yang Mempengaruhi Kecenderungan Fraud Pada Satuan Kerja Perangkat Daerah (Skpd) Di Kota Bogor Analysis Factors Influencing Tendency Of Fraud There Is Set Of Job Peripheral Of Area (Skpd) In Town Of Bogor. *Jurnal Akunida*, 3(2).

- Syahria, R., Kusumawati, F., & Erwanto, A. D. (2019). Detecting Financial Statement Fraud Using Fraud Diamond (A Study on Banking Companies Listed On the Indonesia Stock Exchange Period 2012-2016). *Asia Pacific Fraud Journal*, 4(2). <https://doi.org/10.21532/apfjournal.v4i2.114>
- Syifani, P. A. (2021). Preventive Detection System Pada Kecurangan Laporan Keuangan Berbasis Hexagon Fraud Analysis (Studi Empiris pada Perusahaan BUMN yang terdaftar di Bursa Efek Indonesia Tahun 2015 – 2019). Universitas Islam Indonesia.
- Theotama, G., Denny Waskita, Y., Nugrahesthy, A., & Hapsari, S. (2023). Fraud hexagon in the motives to commit academic fraud. *Jurnal Ekonomi Dan Bisnis*, 26(1), 195–220. [www.ejournal.uksw.edu/jeb](http://www.ejournal.uksw.edu/jeb)
- Triantoro, H. D., Utami, I., & Joseph, C. (2020a). Whistleblowing system, Machiavellian personality, fraud intention: An experimental study. *Journal of Financial Crime*, 27(1), 202–216. <https://doi.org/10.1108/JFC-01-2019-0003>
- Triantoro, H. D., Utami, I., & Joseph, C. (2020b). Whistleblowing system, Machiavellian personality, fraud intention: An experimental study. *Journal of Financial Crime*, 27(1), 202–216. <https://doi.org/10.1108/JFC-01-2019-0003>
- Ulimsyah, U., Mursalim, M., Su'un, M., Ahmad, H., & Hajering, H. (2021). Whistleblowing's Effectiveness in Preventing Fraud through Forensic Audit and Investigative Audit. *Point of View Research Accounting and Auditing*, 2(1), 81–91. <https://doi.org/10.47090/povraa.v2i1.116>
- Vousinas, G. L. (2019). Advancing theory of fraud: the S.C.O.R.E. model. *Journal of Financial Crime*, 26(1), 372–381. <https://doi.org/10.1108/JFC-12-2017-0128>
- Wahyulistyo, F., & Cahyonowati, N.-. (2023). Determining Factors of Asset Misappropriation Tendency by Employees in Perspective of Fraud Hexagon Theory. *Jurnal Dinamika Akuntansi*, 15(1), 52–67. <https://doi.org/10.15294/jda.v15i1.42090>
- Wolfe, D. T., & Hermanson, D. R. (2004). The Fraud Diamond: Considering the Four Elements of Fraud. *The CPA Journal*, 74(12), 38–42.
- Yusrianti, H., Ghozali, I., Yuyetta, E., Aryanto, & Meirawati, E. (2020). Financial statement fraud risk factors of fraud triangle: Evidence from Indonesia. *International Journal of Financial Research*, 11(4), 36–51. <https://doi.org/10.5430/ijfr.v11n4p36>
- Zakaria, N. B., & Mohammed, N. F. (2021). The Influencing Factors of Employee Fraud in Malaysia Financial Institution: The Application of the Fraud Pentagon Theory. In *Article in Academy of Strategic Management Journal* (Vol. 6). <https://www.researchgate.net/publication/353322388>