The Effect of Whistleblowing System toward Fraud Prevention: Mediation of Forensic and Investigative Audit

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Article info

Abstract

This study aims to determine the effect of whistleblowing system toward fraud prevention with forensic audit and investigative audit as a mediating variable. The population of this study are auditor in Inspectorate of Banten Province. The result of this study indicates that first, whistleblowing system partially have a positive significant effect on the forensic audit. Second, whistleblowing system partially have a positive significant effect on the investigative audit. Third, whistle-blowing system partially have a positive significant effect on the fraud prevention. Forth, investigative audit partially have a positive significant effect on the fraud prevention. Fifth, forensic audit partially have a positive significant effect on the fraud prevention.

Keywords: Forensic Audit, Fraud Prevention, Investigative audit, and Whistleblowing System.

1. Introduction

According to the Association of Certified Fraud Examiners (2018), fraud is define as abuse of personal gain through misuse of organizational resources or assets. In terms of accounting and auditing, fraud is an act of manipulating financial statements that carried out intentionally or planned by obtaining benefits from other parties. Act of corruption of fraud can be carry out by government agencies and company management, so it is very detrimental to many parties. Fraud is a latent danger that threatens the sustainability of organization. The research show by Association of Certified Fraud Examiners (2017), every year an average of 5% of the organization's income becomes a victim of fraud, therefore fraud is a latent danger that can threaten world economic growth.

In the government sector, Covid-19 pandemic is a big threaten, because the risk of fraud is also getting wider through cyber attacked along with the intensive use of information technology when working from home (WFH). We also need to be aware of the potential for fraud in the cost of han-
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Handling Covid-19. As reported by the KPK website, the cost of handling COVID-19 in 2020 was recorded is Rp. 695.20 T. With this large budget allocation, we must be more vigilant in conducting checks and balances in expenditures, because vulnerabilities can occur in recording receipts, distribution of aid and misappropriation of grants from the public or private sector given to the task force and all government agencies (kpk.go.id).

The provision of social assistance funds in a pandemic situation opens a gap for corruption, where supervision and transparency are lacking because speed and broad accessibility are prioritize and accompanied by various irregularities and abuse of authority by irresponsible authorities. This is prove through the Indonesian National Police Data in 2020, which recorded 107 cases of social assistance abuse that occurred in 21 regions of Indonesia. This include 39 cases in West Java, 7 cases in Riau, 7 cases in NTT and South Sulawesi, 5 cases in East Java, 3 cases in Banten, 2 cases in Central Sulawesi, 2 cases in South Sumatra, North Maluku and West Sulawesi. Then 1 case in the Riau Islands, West Sumatra, North Kalimantan, Papua, and Bengkulu (Ramadhani et al., 2021).

The concerns of many parties regarding the potential for corruption in social assistance funds are not without a reason. The KPK has received 1,650 public complaints regarding the distribution of social assistance funds through the JAGA application since it was first launch by the KPK for 6 months. Not only the KPK, the Indonesian Ombudsman also received 1,210 reports from various elements of society related to abuse in the field, these 1,210 reports consisted of 699 Police Reports, 284 Judicial Reports, 82 Prosecutors Reports, 35 Correctional Institution Reports, 13 Defense Reports, and 7 Army Reports (ombudsman.go.id).

Indonesia Corruption Watch (ICW) monitored the trial of corruption cases from January to December 2020, as a result, the total state losses caused by corrupt practices throughout 2020 reached Rp 56.7 trillion. This year's losses have quadrupled compared to 2019, in 2019, state losses were around Rp. 12 trillion. Indonesia Corruption Watch (ICW) noted that throughout 2020 there were at least 1,218 cases tried at the Corruption Court, High Court, and Supreme Court with the total 1,298 defendants (nasional.kontan.id).

The Association of Certified Fraud Examiners (ACFE) defines fraud as an unlawful act that is carried out intentionally for a specific purpose (manipulation or giving false reports to other parties) by people from inside or outside the organization to gain personal or group benefits that directly or indirectly harm other parties (ACFE Inc, 2018). Fraud will always occur when there is no previous prevention and detection (Siddiq et al., 2017; Kennedy & Siregar, 2017; Aulia et al., 2019; Noble, 2019; Larum et al., 2021; and Putra & Kusnoegroho, 2021).

The corruption case of the Covid-19 social assistance fund for the 2020 fiscal year ensnared the former Regent of Mamberamo Raya, namely Dorinus Dasinapa, which caused a state loss Rp 3.1 billion. The process of the alleged corruption case began when the Mamberamo Raya Regency Government refocused the budgets of five Regional Apparatus Organizations (OPD) with a value of Rp. 23 billion. From the results of the BPKP, it was found that the alleged budget cuts of Rp 3.1 billion were then followed up by the Papuan Police. Rp 2 billion was used by Dorinus Dasinapa for the purposes of the Regional Head Election. For his actions, the suspect Dorinus Dasinapa was charge with Article 2 Paragraph (1) and/or Article 3 of the Law of the Republic of Indonesia Number 31 of 1999.

Fraud prevention is activities that should be carry out in earnest by management and internal audit in the central and regional government sectors. The process of law enforcement in the judicial sector has not been running effectively, it can be saw from the many cases of law violations that occur in both the private and government sectors. Disclosure of fraud and corruption can be assist by an investigative audit. An investigative audit is a special audit conducted in relation to indicators of criminal acts of corruption, abuse of authority, and development failures. This investigative audit is the process of seeking, discovering, and collect evidence systematically with the aim of revealing whether or not an act and its perpetrators occurred in order to take further legal action (Pusdiklatwas BPKP, 2010). Therefore, one of the government's efforts to overcome and uncover fraud in government agencies or the public sector is to conduct investigative audits and forensic audit in their examinations (Rahim et al., 2020).

Whistleblowing system is part of the internal control system in preventing irregularities and fraud practices as well as strengthening implementation of good governance practices (KNKG, 2008). Basically, whistleblowing system is quite effective for detecting fraud, where almost most government agencies have the system to reduce corruption. An
effective and transparent of whistleblowing system will encourage and increase employee participation in reporting suspected fraud. The existence of whistleblowing will encourage organizations to conduct forensic audits. This description indicates a positive relationship between whistleblowing and forensic audits. This in line with research conducted by Panjaitan, (2018); Rahmida & Urumsah, (2020); Ulimsyah et al., (2021); and Clyde et al., (2022) which state that whistleblowing system has a positive significant effect toward forensic audit.

On the other hand, the existence of a whistleblowing system can encourage organizations to conduct investigative audits. This description indicates a positive relationship between whistleblowing and investigative audits. This is in line with research conducted by Rahmida & Urumsah, (2020); and Ulimsyah et al., (2021) which states that the whistleblowing system has a positive significant effect toward investigative audits.

Whistleblowing will arise when there is a conflict between employee loyalty and the protection of the public interest. If the whistleblowing system is implement properly by employees, it can prevent fraud within the organization. This is in line with research conducted by Urumsah et al., 2018; Ulimsyah et al., 2021; Maulida & Bayunitri, 2021; Kusumawardani & Sari, 2021; and Priyadi et al., 2022) which states that the whistleblowing system has a positive significant effect toward fraud prevention.

In preventing acts of fraud in the organization, it can be done by understanding existing risks, observing fraud trends and paying attention to fraud symptoms that have the potential to cause fraudulent actions. His study supports research conducted by Syahputra & Urumsah, (2019); and Ulimsyah et al., (2021), which stated that investigative audit have a positive significant effect on fraud prevention.

Forensic audit has an effect on fraud prevention. Forensic audit is used to examine evidence for a statement or disclosure of financial information to determine its relationship with standard measures that are adequate for the needs of evidence in court (Oyergoba, 2021; Bello et al., 2022; and Fabian et al., 2022). This study supports research conducted by Urumsah et al., 2018; Syahputra & Urumsah, 2019; and Ulimsyah et al., 2021) but this research is inversely proportional to research conducted by Akenbor & Akenbor (2014) which states that forensic audit has a significant negative relationship to fraud prevention.

2. Hypothesis Development

Whistleblowing System on Forensic Audit

Whistleblowing system is a system to report the violations action that happen in organization, it can be provide convenience for whistleblowers to report indications of fraud. With the indication of fraud reported to the organization it becomes a warning that there are indications of fraud in the organization. The existence of whistleblowing system will encourage the organization to carry out audits forensics. This is in accordance with research conducted by Panjaitan (2018); Triantoro et al. (2020); Rahmida & Urumsah (2020); Riantika (2021) and Daurohmah et al. (2021) which state that there is a positive relationship between the whistleblowing system and the forensic audit. From the results of the description above, it can be concluded that whistleblowing system have a positive effect to forensic audit:

H1: Whistleblowing system has a positive effect on forensic audit

Whistleblowing System on Investigative Audit

The implementation of whistleblowing system within the organization will increase the intensity of fraud reporting, it will increase the reports from whistleblower that can encourage the organization to follow up with conduct investigative audits. The implementation of the whistleblowing system can help the government auditor to carry out investigative audit activities, because the reports of whistleblowing system is an early indication of a violation or fraud. The report can be followed up and it is hoped that there will be a whistleblowing system that can minimize the possibility of fraud, because this system, facilitate the intensity of employees to report the indications of fraud within the organization by guarantee the confidentiality of the reporter's personal data. In addition, the implementation of whistleblowing system is expected to reduce the level of fraud that occurs within the organization, which can prevent the organization from losses arising from acts of fraud (Miceli et al., 1991; and Khan et al., 2022). This is in accordance with research conducted by Mamahit & Urumsah (2018); Rahmayani et al. (2014) and Rahmida & Urumsah (2020) which states that the whistleblowing system has a significant effect on the audit investigation. From the results of the description above, it can be concluded that whistleblowing system have a positive effect to investigative audit:
H2: Whistleblowing System has a positive effect on investigative audit

Whistleblowing System on Fraud Prevention

Based on the various cases of fraud that occurred, efforts are needed to prevent fraud. Fraud prevention is a way to minimize opportunities, counteract, and evaluate each activity that has a risk of fraud. The implementation of whistleblowing system can be used as a measure to prevent fraud in organization. Whistleblowing system can be considered as a place for whistleblower to report violations of fraud that occur within the organization. Whistleblower has a very important role in uncovering irregularities that occur in the organization. However, the risk that faced by a whistleblower very difficult to avoid, so the most of people choose not to disclose significant deviations happened (Widyawati et al., 2019). The application of whistleblowing system can to be the early warning system to the case of fraud in the organization. If fraud can be detected early, the less fraudulent acts conducted. If associated with fraud diamond theory, variable whistleblowing system related to one of the elements fraud diamond theory that is opportunity (chance). If there is an opportunity in a work environment, it will provide an opportunity for employees to act fraudulently. Early detection efforts that can be implemented to prevent fraud in organization is whistleblowing system. This is in accordance with research conducted by Widyawati et al. (2019) and Sari & Nugroho (2020) who state that whistleblowing system have a positive effect on fraud prevention. From the results of the description above, it can be concluded that whistleblowing system have a positive effect to fraud prevention:

H3: Whistleblowing system have a Positive Effect on Fraud Prevention

Investigative Audit on Fraud Prevention

An investigative audit is an audit with a specific purpose that use to prove allegations irregularities in the form of fraud, irregularity, illegal expenditure and authority abuse in the field management of finance state, which fulfills the elements of a criminal act of corruption that must be disclosed by the examiner and followed up by the competent authority, the prosecutor's office or the police, based on the provisions of the applicable laws and regulations (Fauzan et al., 2019). An investigative audit is a skill possessed by a forensic accountant in the investigation process.

In general there is no fundamental difference between forensic audits with investigative audits, but what makes the difference is the basis of the audit authority investigative audit rests with the organization unit, while the basis of authority lies with the Forensic audit is the Criminal Procedure Code. If the investigator considers it necessary to ask for an opinion expert. The purpose of an investigative audit is to follow up on indications or findings of fraud on the previous audit and prove the truth based on the complaint, while the audit forensics aims to assist investigators in searching for evidence in an activity law. The results of this study have proven that investigative audits have proven significant in fraud prevention. This study supports research conducted by Syahputra & Urumshah (2019); and Fauzan et al. (2019) which stated that the investigative audit was proven positive effect on prevention fraud. From the results of the description above, it can be concluded that investigative audit have a positive effect to fraud prevention: H4: Investigative audit has a positive effect on fraud Prevention

Forensic Audit on Fraud Prevention

Forensic audit can be adapted as an internal audit strategy to prevent fraud. Forensic auditors need to have the skills to determine obtaining evidence in order to present findings and explanations in a way that can be used to support administrative, civil or criminal action (Aigienohuwa (2017); Simeon et al. (2018); and Alao (2016). Forensic audit carried out by utilizing special investigative skills in carrying out investigations, the results can submitted to court. This description indicates that there is a positive relationship between forensic audit with fraud prevention. The results of this study are in line with research conducted by Mulyadi & Nawawi (2020); Durnila & Santoso (2018); and Ulimsyah et al., (2021). From the results of the description above, it can be concluded that forensic audit have a positive effect to fraud prevention: H5: Forensic audit has a positive effect on fraud prevention

3. Data and Methods

This is a quantitative study used hypothesis testing for making references about parameters of the population. The population of this study is all auditor at the Inspectorate of Banten Province, because Inspectorate is a supervisory agency within the local government, at the provincial, city and
district levels. Inspectorate plays an important role in encouraging local government officials to achieve the goals and objectives of the regional apparatus work unit (SKPD) to create good government. Therefore, the inspectorate as the government's internal auditor in carrying out the audit function, must be carried out in a well-coordinated manner.

The sample in this study is 56 auditor of Inspectorate Banten Province. Researcher use purposive sampling method, with implemented the criteria to determine the sample of this research consist of, the inspectorate officers who have a minimum educational background of undergraduate (S-1) and have a minimum of two year work experience, because they have had the time and experience to adapt and assess the performance and conditions of the work.

The data in this study were collected by distribute questionnaires to the respondents directly. This technique is adopted since it is able to give high response rate. This study use one endogenous variable, namely fraud prevention, two mediating variable namely forensic audit and investigative audit, and one exogenous variable namely whistleblowing system.

This study use Partial Least Square (PLS) to analyze the data. PLS testing must meet two criteria: the outer model test and the inner model test. Testing the outer model is related to the validity and reliability test of the research indicators. Validity testing uses discriminant validity (AVE), while reliability testing uses Cronbach-Alpha values and composite reliability. The results of testing the validity and reliability in this study are show in table 1.

Tabel 2. Test result

<table>
<thead>
<tr>
<th>Variables</th>
<th>Original Sample</th>
<th>t Statistics( [O/STERR ] )</th>
<th>P Values</th>
<th>Hypothesis Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS → FA</td>
<td>0.391</td>
<td>3.249*</td>
<td>0.001*</td>
<td>Accepted</td>
</tr>
<tr>
<td>WS → IA</td>
<td>0.291</td>
<td>2.626*</td>
<td>0.007*</td>
<td>Accepted</td>
</tr>
<tr>
<td>WS → FP</td>
<td>0.192</td>
<td>2.166*</td>
<td>0.037*</td>
<td>Accepted</td>
</tr>
<tr>
<td>IA → FP</td>
<td>0.525</td>
<td>4.351*</td>
<td>0.000*</td>
<td>Accepted</td>
</tr>
<tr>
<td>FA → FP</td>
<td>0.258</td>
<td>2.242*</td>
<td>0.019*</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Note: WS = whistleblowing system, FA = forensic audit, IA = investigative audit, FP = fraud prevention

Table 2 shows the direct test results of the whistleblowing system, forensic audit, investigative audit, and fraud prevention. Hypothesis 1 expects the whistleblowing system has a positive effect on forensic audit. These findings state that the whistleblowing system variable positively influences forensic audit. The original value is 0.391, the T-statistic is 3.249>1.96, and the p-value is 0.001. These results support the first hypothesis.

Hypothesis 2 expects the whistleblowing system has a positive effect on investigative audit. These findings state that the whistleblowing system variable positively influences investigative audit. The original value is 0.291, the t-statistic is 2.626>1.96, and the p-value is 0.007. These results support the second hypothesis.

Hypothesis 3 expects the whistleblowing system a positive effect on fraud prevention. These findings state that the whistleblowing system variable positively influences fraud prevention. The original value is 0.192, the T-statistic is 2.166>1.96,
and the p-value is 0.037. These results support the third hypothesis.

Hypothesis 4 expects the investigative audit has a positive effect on fraud prevention. These findings state that the investigative audit variable positively influences fraud prevention. The original value is 0.525, the t-statistic is 4.351>1.96, and the p-value is 0.000. These results support the forth hypothesis.

Hypothesis 5 expects the forensic audit a positive effect on fraud prevention. These findings state that the forensic audit variable positively influences fraud prevention. The original value is 0.258, the t-statistic is 2.242>1.96, and the p-value is 0.019. These results support the fifth hypothesis.

5. Discussion

Whistleblowing System Toward Forensic Audit

The study indicate that whistleblowing system has a positive effect on forensic audit. Whistleblowing system is a tool to report violations that can provide convenience for whistleblowers to report the fraud indication. The indications of fraud that reported to the organization it becomes early warning, that there are indications of fraud in organization, therefore convenience and protection from whistleblowing system can increase the willingness of individual in report any possible fraudulent acts within the organization. This thing, will make the easier way for an organization to carry out forensic audits, through reports reported by whistleblowing system. In line with the concept stated above, empirically several studies have previously proven the concept whistleblowing system have a positive effect with forensic audit. As same as the research conducted by Panjaitan (2018); Rahmida & Urumsah (2020); and Ulimsyah et al. (2021) which stated that the whistleblowing system have a positive effect on the audit forensic.

Whistleblowing System Toward Investigative Audit

The study indicate that the whistleblowing system has a positive effect on investigative audit. Whistleblowing system can help auditors to perform investigative audit activities, because reports that come into whistleblowing system is an early indication of a fraud. The report can be follow up and it is hope that with whistleblowing system can reduce the possibility of fraud in organization, because with this system it makes the easier way for employees to report indications of fraud within the organization by guarantee the confidentiality of personal data reported. In addition, the application whistleblowing system is expected to reduce the level of action fraud that occur in the organization, which can prevent the organization from losses arising from actions of fraud (Miceli et al., 1991). Empirically, several previous studies have proven the concept of whistleblowing system has a positive relationship to the investigative audit. Such as the research conducted by Rahmayani et al. (2014); Rahmida & Urumsah (2020); and Ulimsyah et al. (2021) which stated that whistleblowing system have a positive effect on the investigative audit.

Whistleblowing System Toward Fraud Prevention

The study indicate that whistleblowing system has a positive effect on fraud prevention. Whistleblowing system is the early warning system for detect fraud, that can be prevent fraud in the institution. Associated with fraud diamond theory, variable whistleblowing system related with one of the elements fraud diamond theory that is opportunity (opportunity). If there is opportunities in a work environment, it will provide opportunities for employees to act fraudulently. Efforts for early detection that can be apply to prevent this matter is by implemented whistleblowing system in the organization. The whistleblowing system that run well, can be prevented a fraudulent actions in an organization. In line with the concept stated above, empirically several studies have previously proven the concept whistleblowing system have a positive relationship with fraud prevention. Like the research conducted by Widyawati et al. (2019); Kurniawan (2019); Ulimsyah et al. (2021) which states that whistleblowing system have a positive effect to fraud prevention.

Investigative Audit Toward Fraud Prevention

The study indicate that investigative audit has a positive effect on fraud prevention. An investigative audit is the expertise of a forensic accountant in investigative process. In general, there is no fundamental difference between forensic auditing and investigative audit, but what makes the difference is the basis of the audit authority investigative is in the organization / institution, while
the basis of authority is on the audit Forensic is the Criminal Procedure Code, namely if the investigator considers it necessary to ask for help from an expert opinion. The purpose of an investigative audit is to follow up the indications or findings the fraud in previous audit and prove the truth based on the complaint, while the forensic audit aims to assist investigators in searching for evidence in a legal activity. In line with the concept stated above Urumsah et al. (2018); Fauzan et al. (2019) Ulimsyah et al. (2021) stated that the investigative audit have a positive effect on fraud prevention.

**Forensic Audit Toward Fraud Prevention**

The study indicate that forensic audit has a positive effect on fraud prevention. The techniques used in forensic audits have led specifically to detect presence fraud. The technique in detecting fraud deeper and up to the search for who is the perpetrator fraud. An investigative audit can be used as a method effective in detecting fraud because the investigative audit is in the process of checking adapted to the case being examined, the evidence collected must be sufficient, and appropriate, especially when this audit is used for litigation proceedings, which would require the auditor to find valid evidence in the eyes of the law (Rustiarini et al., 2021). Forensic audit carried out by utilizing special investigative skills in carrying out investigatives carried out in such a way that the results can have application to court. The description indicates that there is a positive relationship between forensic audits with fraud prevention. The results of this study are in line with research conducted by Durnila & Santoso (2018) and Ulimsyah et al. (2021), which stated that there is a positive forensic audit have a positive significant effect toward fraud prevention.

### 6. Conclusion and Suggestion

**Conclusion**

The results based on the analysis is guaranteed that whistleblowing system partially have a positive significant effect on the forensic audit, investigative audit and fraud prevention. Investigative audit partially have a positive significant effect on the fraud prevention. Forensic audit partially have a positive significant effect on the fraud prevention.

**Suggestion**

The study is expected to give contributions to the inspectorate auditor, in carrying out the task of conducting an audit of financial statements, an auditor is expected to be able to carry out all audit findings even though these results may have a negative impact on the sustainability of the organization or functional positions in the institution. Secondly, the study is expected to contribute in the expansion of literature and studies, especially about the effectiveness of whistleblowing system toward fraud prevention with audit forensic and audit investigative as a mediating variable.

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