



# Investigating the Structural Model of Whistle Blowing System on Government Procurement Fraud: Examining Mediating Effect of Investigative Audit

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## ABSTRACT

This study aims to develop a fraud disclosure model in government procurement in Indonesia through a whistle blowing system with an investigative audit as a mediator. Disclosure of fraud is the result of an investigative audit. The effectiveness of the implementation of investigative audit procedures will be achieved if the auditor has the ability to carry out each stage in the audit standard. To maximize the performance of investigative audits, a system is needed to uncover fraud. The whistleblowing system is expected to be an effective tool to reveal fraud in government procurement. The research was conducted by distributing questionnaires to respondents electronically by sending a google form link containing a list of questions to auditors at the Supreme Audit Agency (BPK) and internal auditors at the Financial and Development Supervisory Agency (BPKP) throughout Indonesia. The results of the study found that the use of a whistle blowing system could increase the effectiveness of investigative audits on government procurement. Another finding is that investigative audits can reduce the disclosure of government procurement fraud. The effectiveness of the whistle blowing system in reducing the level of disclosure of government procurement fraud does not occur directly, but must be mediated by a good investigative audit. The results of this study indicate that the reporting of government procurement fraud cases on the whistle blowing system must be followed up with a thorough investigative audit so that disclosures of government procurement fraud cases can be traced better. Additional analysis in this study shows that although the functions of external auditors and internal auditors are different, the level and type of disclosure of government procurement fraud do not differ.

**Keywords:** Fraud, Government Procurement, Whistle Blowing System, Audit Investigation

**JEL Classifications:** D73, H57, K42

## 1. INTRODUCTION

Efforts to suppress and minimize fraud incidents are activities that should be carried out in earnest by both management and internal audit in the central and regional government sectors. The factors that cause fraud cannot be separated from the concept of the fraud triangle, namely pressure, opportunity, and rationalization which is known as the fraud triangle (Wilks & Zimbelman, 2004). There are three types of fraud, namely; report engineering, embezzlement of

assets and corruption. Fraud can occur in any organization, at any time and is always dynamic. Fraud is a major risk that threatens not only the achievement of organizational goals in terms of health, performance, finances, but also can bring a greater threat in terms of the good name and reputation of the organization (Amyar et al., 2023). About 70-80% of corruption cases handled by the Corruption Eradication Commission (KPK) occurred in the realm of government procurement of goods/services. The procurement project is very prone to corruption by related parties, apart from

direct appointments, but also through mark-ups on the prices of goods and services (Nasution, 2011; Balasa, 2015; Croom and Brandon-Jones, 2007).

Disclosure of fraud and corruption can be assisted by an investigative audit. An investigative audit is a special audit conducted in relation to indications of criminal acts of corruption, abuse of authority, and development failures. This investigative audit is the process of systematically searching, finding, and collecting evidence aimed at revealing whether or not an act and its perpetrators occurred in order to take further legal action (Lustrilanang et al., 2023). One of the priorities set out in the audit implementation standards is the role and responsibility of the auditor. The effectiveness of the implementation of investigative audit procedures can be achieved if the auditor is able to carry out each stage contained in the audit standard (Fayardi, 2014). To maximize the performance of investigative audits, a system to uncover fraud is needed, namely the whistleblowing system which is expected to be an effective tool to minimize fraud (Xu and Ziegenfuss, 2008; Lewis, 2008; Miceli et al., 2008; Mesmer-Magnus and Viswesvaran, 2005; Montesarchio, 2009; Park and Blenkinsopp, 2009). This study aims to investigate the role of the whistle blowing system in revealing fraud in government procurement in Indonesia. This study also looks at how investigative audits can mediate the effect of the whistle blowing system in revealing fraud in government procurement.

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 2.1. Government Procurement

E-procurement in the public sector is a process of reforming the procurement of goods and services (Thai, 2009; Vaidya et al., 2006; Adersen, 2008; Nugroho et al., 2018; Zahra et al., 2022). Some of the benefits of implementing e-procurement that can be identified from several studies are aimed at preventing or reducing the dysfunctional behavior of procurement actors (Zahra et al., 2021).

According to Presidential Regulation Number 4 of 2015, Government Procurement of Goods/Services is an activity to obtain goods/services by Ministries/Institutions/Regional Work Units/Institutions whose process starts from planning needs until completion of all activities to obtain goods/services. Funds spent through procurement activities can come from the APBN/APBD or grants.

Presidential Regulation Number 54 of 2010 states that electronic procurement or E-Procurement is the procurement of goods/services carried out using information technology and electronic transactions in accordance with statutory provisions. Electronic procurement of goods/services (e-procurement) regulated by Presidential Regulation Number 54 of 2010 consists of e-tendering and e-purchasing. E-Tendering is a procedure for selecting Goods/Services Providers which is carried out openly and can be followed by all Goods/Services Providers registered in the procurement system electronically by submitting 1 (one) offer within a specified time.

E-Purchasing is a procedure for purchasing goods/services through an electronic catalog system (Roup, 2019; Zahra et al., 2022).

### 2.2. Government Procurement Fraud

About 70-80% of corruption cases handled by the Corruption Eradication Commission (KPK) occurred in the realm of government procurement of goods/services. The procurement project is very prone to corruption by related parties, apart from direct appointments, but also through mark-ups on the prices of goods and services (Iqbal and Seo, 2008).

Various cases of corruption can not be separated from the collusion between the perpetrators. Collusion in the procurement of goods/services (PBJ) can be classified into 3 (three) types, namely: (1) horizontal collusion; (2) vertical collusion; and (3) horizontal and vertical combination collusion (Sitompul, 2022). Horizontal collusion is collusion that occurs between partners in the procurement of goods and services. This collusion is carried out by creating pseudo-competition between bidders. This collusion does not involve government officials such as budget users (PA), budget users (KPA), commitment-making officials (PPK), or the PBJ committee (procurement of goods and services). Vertical collusion is collusion between one or more partners and the PBJ committee. Vertical collusion is collusion between one or more partners and the PBJ or PA/KPA/PPK committee. Meanwhile, the combination of horizontal and vertical collusion is collusion between the PBJ and/or PA/KPA/PPK committee and partners. One form of this collusion is a fictitious auction or an auction process that was never actually carried out, but all the administrative requirements and formalities were fulfilled as if the auction had been carried out. This combined collusion usually involves suppliers, sole agents, distributors, and manufacturers.

Indications of leakage of government budget due to corruption and collusion at PBJ can be seen from: (1) the number of government projects that are not on time, not on target, not of right quality, and inefficient; (2) the number of tools purchased cannot be used properly; (3) PBJ is not really needed, because it is planned not based on real needs; (4) shorter life of goods/services which only reaches 30-40%; (5) A percentage of the commission (fee) that must be paid by the contractor, procurement committee, and commitment-making officer (PPK) to the superior on the pretext of organizational spending; (6) the difference in the price of similar goods which is quite conspicuous between one agency and another; and (7) the existence of several different invoices for 1 (one) same type of goods (Hehamahua, 2011).

### 2.3. The effect of Whistle Blowing System on Government Procurement Fraud

Fraud is a fraud that includes the following elements, such as a representation, regarding something material, something that is not true, and is intentionally or haphazardly carried out to then be believed and followed up by the victim so that in the end the victim bears the loss (Zimbelman, 2014). About 70-80% of corruption cases handled by the Corruption Eradication Commission (KPK) occurred in the realm of government procurement of goods/services.

The Whistleblowing System is part of the internal control system in preventing irregularities and fraud practices as well as strengthening the implementation of good governance practices. Some of the benefits of the whistleblowing system according to the National Committee on Governance Policy (2022), include:

1. Availability of key and critical information (critical and key information) for the company to those who must immediately handle it in a safe and controlled manner.
2. With the increasing willingness to report the occurrence of various violations, there is a sense of reluctance to commit violations because of the belief in an effective reporting system.

Whistleblower system is one way that can be used to prevent bid rigging in the procurement of government goods/services, both conventionally and electronically (Xu and Ziegenfuss, 2008; Lewis, 2008; Miceli et al., 2008; Mesmer-Magnus and Viswesvaran, 2005; Montesarchio, 2009; Park and Blenkinsopp, 2009; Patel, 2003). The whistleblower has information/access to information that can be confidential and is known by the whistleblower as an insider in the process of procuring goods/services. Information/access to information held by whistleblowers can be used to prevent bid rigging. In carrying out their duties, whistleblowers submit complaints through the whistleblower system link, communicate with LKPP verifiers through the communication box in the whistleblower system accompanied by concrete evidence. After receiving the report from the whistleblower, LKPP then appoints a reviewer whose job is to review the case reported by the whistleblower.

Prevention of tender collusion with the whistleblower system is an alternative method that can be used by the business competition authorities, because whistleblowers have information accompanied by evidence in the form of documents, pictures, and recordings related to cases of tender conspiracy in the procurement of goods/services that they report. Whistleblower system was established to protect the process of procurement of goods/services so that cases of tender conspiracy do not occur. Whistleblower system also serves to build self-correction. So, violations in the process of procuring government goods/services can be prevented from the start, even from administrative irregularities if found. Based on the description above, the proposed research hypothesis is as follows:

H1: Whistle blowing system has an effect on disclosure of government procurement of goods/services fraud

#### **2.4. The Effect of Whistle Blowing System on Inverstigative Audit of Government Procurement Fraud**

The Whistleblower system in the process of procuring government goods/services is guided by the Head of LKPP Regulation Number 7 of 2012 concerning the Whistleblowing System in the Procurement of Government Goods/Services. A whistleblower can submit a report of a violation in the process of procurement of government goods/services through the official website at [www.wbs.lkpp.go.id](http://www.wbs.lkpp.go.id).

In the process of procuring goods/services, there are three requirements that must be met in order for a whistleblower system to be implemented, the first is that the case has a broad impact on the community, the second is for government agencies at the central level, only procurement cases with a value of more than Rp. 10.000.000.000 (Ten billion Rupiah) that can be processed, the third process of procurement of goods/services must be guided by Presidential Regulation Number 70 of 2012 and use an electronic procurement agency. In the implementation of the whistleblower system in the process of procuring government goods/services, especially to prevent tender conspiracy, it is necessary to have cooperation between LKPP as the institution that handles whistleblower reports and KPPU as the business competition authority. This is necessary because the investigation process carried out by KPPU related to allegations of tender conspiracy in the process of procurement of government goods/services will be difficult to carry out without cooperation with LKPP.

According to Valery (2011) an investigative audit is a form of special audit in the form of a series of investigations aimed at ascertaining the truth of an act of fraud, where the investigation is carried out based on initial indications. The purpose of an investigative audit according to the BPKP Pusdiklatwas (2008) is a systematic and measurable activity to uncover fraud since it was discovered, or indicated an event/event/transaction that can provide sufficient confidence, and can be used as evidence that fulfills the assurance of a truth in explaining the incident. previously assumed in order to achieve justice (search of the truth). There are two types of investigative audits, namely proactive investigative audits and reactive investigative audits.

One of the priorities set out in the audit implementation standards is the role and responsibility of the auditor. The effectiveness of the implementation of investigative audit procedures can be achieved if the auditor is able to carry out each stage contained in the audit standard (Fayardi, 2014). To further maximize the performance of the investigative audit, a system for uncovering fraud is needed, namely the whistleblowing system which is expected to be an effective tool to minimize fraud. Based on the description above, the proposed research hypothesis is as follows:

H2: The whistle blowing system has an effect on the investigative audit of the Government Procurement of Goods/Services

#### **2.5. The Effect of Investigative Audit on Government Procurement Fraud**

Fraud diamond theory explains several indicators that trigger people to commit fraud, including the challenge to beat the system (pressure), for the good of the organization (rationalization), then those related to opportunities are the weakness of the board of directors, inadequate internal control, the ability to obscure fraud, lack of controls to prevent fraudulent behavior, lack of access to information and lack of an audit trail (Nguyen et al., 2021). An investigative audit is carried out if there is a reasonable basis, which is known in an investigative manner as predication. Furthermore, Theodorus (2010) explained on this basis that an investigator devised what, how, who and other questions that he

suspected were relevant to the disclosure of his case, so that he developed a theory of fraud.

Disclosure of fraud and corruption can be assisted by an investigative audit. An investigative audit is a special audit conducted in relation to indications of criminal acts of corruption, abuse of authority, and development failures. This investigative audit is the process of systematically seeking, finding, and collecting evidence with the aim of revealing whether or not an act and its perpetrators occurred in order to take further legal action (Pusdiklatwas BPKP, 2010).

Previous research related to investigative audits in the case of government procurement by Khairinsyah (2005) on the implementation of an investigative audit by the supreme audit agency (BPK) related to the case for the Logistics Procurement of General Elections (Pemilu) in 2004 at the General Elections Commission (KPU). The results showed that starting with preparing predications, reviewing predications, preparing investigative audit plans and submitting investigative audit reports to the authorities. The relationship between investigative audits and disclosure of fraud in corruption cases is also shown in the research of Fauzan (2015) which concludes that investigative audits have a very good effect on fraud disclosure. Based on the description above, the proposed research hypothesis is as follows:

H3: Investigative audit affects the disclosure of government procurement of goods/services fraud.

### 3. RESEARCH METHODOLOGY

The population in this study were auditors at the Supreme Audit Agency (BPK) and internal auditors at the Financial and Development Supervisory Agency (BPKP) throughout Indonesia. The research was conducted by distributing questionnaires to the target population electronically by sending a google form link containing a list of questions to auditors at the Supreme Audit Agency (BPK) and internal auditors at the Financial and Development Supervisory Agency (BPKP) throughout Indonesia.

The number of questionnaires that have been sent to the target population via the google form link is 300 questionnaires. Of the 300 questionnaires distributed, a total of 125 responses were willing to fill out the questionnaire. The total number of questionnaires that can be used for processing is only 118 questionnaires. The analysis of the structural model with WarpPLS 7.0 is conducted to show the measurement results of the full structural equation model.

### 4. RESULTS

The variable of disclosure of fraud in government procurement of goods and services is measured by eight questions (FP1-FP8). Respondents' answers to the variable Disclosure of Fraud in Government Procurement of Goods and Services are very interesting, because of the varying opinions among auditors. For the types of fraud disclosed by the auditors, the average value is below the mean theoretical range (<3), namely fraud in

obtaining discounts (payment discounts) from providers, fraud in obtaining provider day gifts and affiliation with providers. These results illustrate that the audits conducted by the BPK Auditor, BPKP and BPJS Internal Auditor, related to the procurement of government goods/services did not reveal any forms of fraud such as receiving gifts from providers, getting price discounts from providers or affiliate relationships between procurement managers and providers of government goods/services procurement.

However, for several types of fraud disclosed by the auditors, the average value is above the average theoretical range (<3), namely fraud in the preparation of HPS, price mark-ups, procurement that is not according to demand, procurement of goods/services government that is not in accordance with the procurement system and procedures, as well as the breakdown of government goods/services procurement packages. These results illustrate that the audits conducted by the BPK Auditors, BPKP and BPJS Internal Auditors, related to the procurement of government goods/services reveal forms of fraud such as fraud in the preparation of HPS, price mark-ups, procurement that is not according to demand, procurement of government goods/services that are not in accordance with the requirements. with procurement systems and procedures, as well as solving government goods/services procurement packages. The Whistle Blowing System variable in the Procurement of Goods/ Services is measured by 8 (eight) questions (WB1-WB8). The results of the study describe the high capability of the Whistle Blowing System in its utilization by BPK and BPKP auditors in Indonesia. However, there is one indicator that has an average value below the mean theoretical range (<3), namely the statement that the reason for whistleblowers reporting fraud in fraud cases is based on the desire to get rewards from the government. These results indicate that the reason why whistleblowers report cases of fraud in the procurement of orders is not because they want a reward.

The investigative audit variable in the Procurement of goods and services is measured by 10 (ten) questions (AI1-AI10). The results illustrate that investigative audits in cases of government procurement of goods and services are carried out very well by BPK and BPKP auditors throughout Indonesia.

Table 1 shows the composite reliability value for each construct >0.70 and Cronbach's alpha above 0.7. This indicates that the instrument used to measure the variables has good reliability. Reliability reflects that the instrument used to measure the variables in this study has consistently produced the same results every time a measurement is made. To see the convergent validity of this study, the following are the results of data processing in Table 2.

Table 2 shows that all construct indicators of fraud disclosure in government goods/services procurement (FP1, FP2, FP3,

**Table 1: Reliability analysis**

Construct	Criteria	Composite reliability	Cronbach's alpha	Results
FraudDc	>0.70	0.925	0.905	Reliable
invstgs	>0.70	0.825	0.758	Reliable
whistle	>0.70	0.838	0.755	Reliable

Source: Processed Research Data, 2021



FP4, FP5, FP6, FP7, and FP8) have a loading value >0.60. The investigative audit construct indicators (AI1, AI2, AI3, AI4 AI5, AI7, AI8, AI9, and AI10), have a loading value >0.60, while another indicator (AI6) must be removed from the model for further testing. Whistle blowing system construct indicators (WB1, WB2, WB3, WB6, and WB8), have a loading value >0.60, while several other indicators (WB4, WB5, and WB7) must be removed from the model for further testing. These results indicate that the indicators included in the research model have good convergent validity with a significance of <0.01. Research instruments that have met the element of convergent validity indicate that the instrument is able to collect data with the same pattern to measure the same construct. Moreover, to see the discriminant validity of this study, the following are the results of data processing in Table 3.

Table 3 shows that the cross-loading value is lower than the construct loading value. The cross-loading value indicates that the discriminant validity criteria have been met. Indications of the fulfillment of discriminant validity can also be seen from the results of the AVE root value which is greater than the correlation of other constructs. The results of the AVE roots in the diagonal column show that all variables have higher AVE roots than the other correlation constructs. The cross-loading value of the AVE root indicates that the discriminant validity of the instrument in this study is believed to be fulfilled, so that structural model analysis is further examined.

The purpose of the study was to examine the mediating effect of investigative audits in predicting the effect of the whistle blowing system in cases of government procurement of goods and services with fraud on disclosure of fraud in cases of government procurement of goods and services (fraud). Analysis of the

**Table 2: Convergent validity**

Construct	Criteria	Loading factor	P-value	Results
Disclosure of procurement fraud				
FP1	>0.60	0.953	<0.001	Valid
FP2	>0.60	0.964	<0.001	Valid
FP3	>0.60	0.949	<0.001	Valid
FP4	>0.60	0.908	<0.001	Valid
FP5	>0.60	0.932	<0.001	Valid
FP6	>0.60	0.997	<0.001	Valid
FP7	>0.60	0.874	<0.001	Valid
FP8	>0.60	0.974	<0.001	Valid
Investigative audit				
AI1	>0.60	0.958	<0.001	Valid
AI2	>0.60	0.927	<0.001	Valid
AI3	>0.60	0.957	<0.001	Valid
AI4	>0.60	0.931	<0.001	Valid
AI5	>0.60	0.861	<0.001	Valid
AI7	>0.60	0.927	<0.001	Valid
AI8	>0.60	0.975	<0.001	Valid
AI9	>0.60	0.986	<0.001	Valid
AI10	>0.60	0.984	<0.001	Valid
Whistleblowing				
WB1	>0.60	0.973	<0.001	Valid
WB2	>0.60	0.96	<0.001	Valid
WB3	>0.60	0.955	<0.001	Valid
WB6	>0.60	0.6	<0.001	Valid
WB8	>0.60	0.661	<0.001	Valid

Source: Processed research data, 2021

structural model with WarpPLS 7.0 shows the measurement results of the full structural equation model as follows (Figure 1):

Indications of the fit model used in this study based on the output of the WarpPLS version 7.0 Program are the Average Path Coefficient (APC), Average R-square (ARS) and Average Variance Inflation Factor (AVIF), Average adjusted R-squared (AARS), and Average full collinearity VIF (AFVIF). According to Kock (2011), the criteria for fulfilling the goodness of fit of a first model is that the -value for both APC and ARS and AARS must be significant at the 0.05 level (P-value < 5). The second criterion is that the AVIF and AFVIF values are not more than 5 (AVIF and AFVIF < 5). The following is the output of the fit model in Table 4.

Based on the output, the fit model has a value of APC = 0.256, P < 0.001, ARS = 0.162, P < 0.017, AARS = 0.152, P < 0.022, AVIF = 1.484, (acceptable if ≤5, ideally ≤3.3) and AFVIF = 1.058, (acceptable if ≤5, ideally ≤3.3). The WarpPLS provisions state that the value of for APC and ARS must be <0.05 (significant). AVIF and AFVIF values as indicators of multicollinearity must be <5. Referring to these provisions, it can be concluded that the research model is fit.

This hypothesis testing is intended to answer the research questions posed. Hypothesis testing using the Structural Equation modeling (SEM) analysis tool with the WarpPLS version 7.0 Program, the following is the hypothesis testing of each research model. The first hypothesis states that the whistle blowing system affects the disclosure of government procurement of goods/services fraud. Based on the output of WarpPLS 7.0 as shown in Figure 1, it is known that the coefficient value of the Whistleblowing→Fraud path is -0.13 with a value of <0.07. These results indicate that the whistle blowing system has a negative effect on the disclosure of government procurement of goods/services fraud, but it is not supported statistically. Based on the description above, it can be concluded that hypothesis 1 is rejected with a coefficient of determination of 0.29. The results of this study indicate that the whistle blowing system can reduce the disclosure of government goods/services procurement fraud. However, the results of this

**Table 3: Discriminant validity**

Variable	FraudDc	Invstgs	Whistle
FraudDc	0.782	-0.067	-0.273
Invstgs	-0.067	0.605	0.062
Whistle	-0.273	0.062	0.741

Source: Processed research data (2021)

**Table 4: Measurement of fit model**

Parameter	Value	Limitation	Conclusion
Average path coefficient	0.256, P<0.001	P<0.05	Model fit
Average R-square	0.162, P<0.017	P<0.05	Model fit
Average adjusted R-squared	0.152, P<0.022	P<0.05	Model fit
Average variance inflation factor	1.484	Acceptable if ≤5, ideally ≤3.3	Model fit
Average full collinearity VIF	1.058	Acceptable if ≤5, ideally ≤3.3	Model fit

Source: Processed Research Data, 2021

study are not supported statistically, thus allowing for intervening variables that can support the disclosure model of government procurement fraud.

The second hypothesis states that the whistle blowing system has an effect on the investigative audit of the government’s procurement of goods/services. Based on the output of WarpPLS 7.0 as shown in Figure 1, it is known that the coefficient value of the whistle blowing → investigative audit path is 0.18 and is significant with a value of <0.02, so it can be concluded that the blowing system has a positive effect on the investigative audit of government procurement of goods/services. Based on the description above, it can be concluded that hypothesis 2 is accepted with a coefficient of determination of 0.03. The results of this study indicate that the use of a whistle blowing system can increase the effectiveness of investigative audits in cases of government procurement of goods/services.

The third hypothesis states that investigative audits affect the disclosure of government procurement of goods/services fraud. Based on the output of WarpPLS 7.0 as presented in Figure 1, it is known that the investigative audit path coefficient → fraud disclosure is -0.45 and is significant with a value of <0.01 so it can be concluded that investigative audits have a negative effect on disclosure of government procurement fraud. Based on the description above, it can be concluded that hypothesis 3 is accepted with a coefficient of determination of 0.29. The results of this study indicate that a good investigative audit can reduce the disclosure of government procurement of goods/services fraud.

In addition, the test of the mediation model that is carried out is the investigative audit construct mediating the effect of the whistle blowing system on the disclosure of government goods/services procurement fraud. Testing the effect of mediation was carried out with the WarpPLS 7.0 Program. The first test is to examine the direct effect of the whistle blowing system on the disclosure of government procurement of goods/services fraud. This stage has been carried out with the WarpPLS version 7.0 Program. The tests carried out are model fit testing, path coefficient analysis and P-value. The test results are presented in Figure 2.

Based on Figure 2, it is known that there is a negative effect of the whistle blowing system on the disclosure of government goods/services procurement fraud of -0.44 at P < 0.01. This result indicates that there is a direct effect of the whistle blowing system on the disclosure of government procurement of goods/services fraud without including the mediation variable.

The estimation results of the second step are seen based on Figure 2 which shows a statistically insignificant effect between the variable whistle blowing system on the disclosure of fraud in the government procurement of goods/services of -013 with a value of <0.07. These results indicate that this simultaneous test reduces the significance value of the influence of the whistle blowing system variable on the disclosure of government goods/services procurement fraud to P < 0.07 so that it becomes insignificant. The results also show a decrease in the coefficient value of the whistleB→FraudDc path. Direct testing produces a path coefficient value of -0.44 but after simultaneous testing, the path coefficient

Figure 1: Output of WarpPLS 7.0-Full model

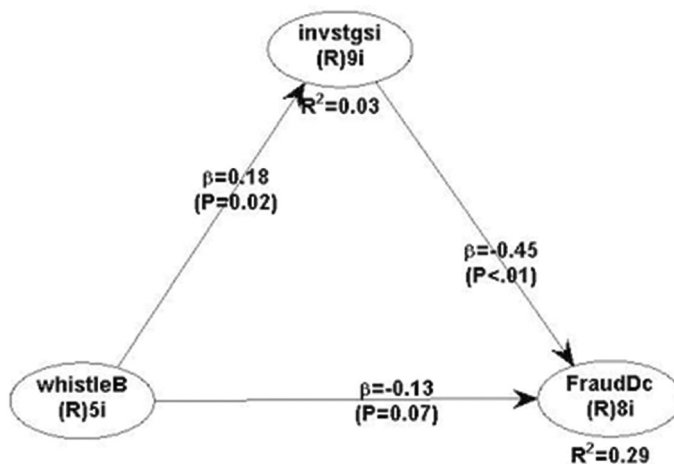
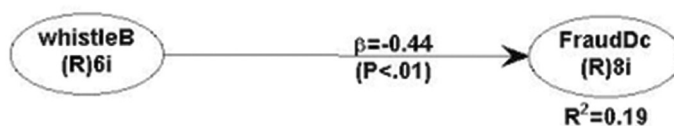


Figure 2: Output WarpPLS 7.0 of direct effect EP→SA



Source: WarpPLS 7.0 Output output

Table 5: Multigroup test results (Group 1, External Auditor. Group 2, Internal Auditor)

Track	Std error	P-value		t-ratio
		one-tailed	two-tailed	
whistleB→FraudDc	0.086	0.364	0.728	0.348
whistleB→invstgsi	0.087	0.383	0.766	0.298
invstgsi→FraudDc	0.086	0.337	0.673	0.422

Source: Processed Research Data, 2021

value decreases to -013. Based on these explanations, it can be concluded that the investigative audit is a full mediating variable.

The results indicate that the ability of the whistle blowing system to reduce the level of disclosure of fraud in cases of government procurement of goods/services does not occur directly, but must be mediated by a good investigative audit. The results of this study indicate that the reporting of cases of fraudulent government procurement of goods/services on the whistle blowing system must be followed up with a thorough investigative audit of the reporting to determine the disclosure of cases of government procurement fraud.

The last testing is model analysis with multigroup. Multigroup analysis or often called multisample analysis aims to compare data analysis based on sample characteristics with two or more data sets. The trick is to compare each path coefficient for each sample group and compare the standard error and t-statistical significance/P-value obtained through the resampling procedure (Ghozali and Latan, 2014). Conceptually, multigroup analysis testing is carried out as a result of the presence of categorical moderator variables such as age, class, ethnicity, gender or size that can divide the population into two or more sample groups, so that the data collected will be divided into several groups after passing the measurement model stage.

In this study, the group to be analyzed consists of two groups, namely the external auditor group (BPK) and the internal auditor group (BPKP and BPJS internal auditor). The purpose of the analysis in the two groups is based on the different functions of the two auditors so as to allow different levels and types of fraud disclosures, which in this study focuses on the case of government procurement of goods/services. Multigroup analysis will compare the results of the full model analysis between two groups, namely the external auditor group and the internal auditor group. The analysis will use the help of the WarpPLS 7.0 Program which already has a multigroup analysis feature. The results of the multigroup analysis can be seen in Table 5.

Table 5 shows the results of multigroup testing between group 1, namely external auditors and group 2, namely internal auditors. The results show a comparison of the results of the two groups with four criteria, namely standard error, one-tailed P-value, two-tailed P-value and t-ratio for each hypothesized path.

The results of the comparison of the standard errors of the two groups for all hypothesized paths show  $P > 0.05$ . These results indicate that there is no significant difference in standard error between external and internal auditors. For comparison of P-values, both one-tailed and two-tailed, for the two groups for all hypothesized paths, the P-values are  $> 0.05$ . These results indicate that there is no significant difference in P-value between external auditors and internal auditors. For comparison, the t-ratio of the two groups for all hypothesized paths shows a  $P > 0.05$ . These results also indicate that there is no significant difference in t-ratio between external and internal auditors.

The results of this multigroup test conclude that although the functions of external auditors and internal auditors are different, the level and type of fraud disclosure which in this study focuses on cases of government procurement of goods/services do not show different results.

## 5. CONCLUSION

The results showed that whistle blowing system can reduce disclosure of government procurement of goods/services fraud in government procurement of goods/services. However, the results of this study are not supported statistically, thus allowing for intervening variables that can support the disclosure model of government procurement fraud. Utilization of the whistle blowing system can increase the effectiveness of investigative audits in cases of government procurement of goods/services. A good investigative audit can reduce the disclosure of government procurement of goods/services fraud.

The ability of the whistle blowing system to reduce the level of disclosure of fraud in cases of government procurement of goods/services does not occur directly, but must be mediated by a good investigative audit. The results of this study indicate that the reporting of cases of fraudulent government procurement of goods/services on the whistle blowing system must be followed up with a thorough investigative audit of the reporting to determine the disclosure of cases of government procurement fraud. Although the

functions of external auditors and internal auditors are different, the level and type of fraud disclosure which in this study focuses on the case of government procurement of goods/services does not show different results.

As theoretical recommendation, develop existing models is suggested by considering other variables related to fraud prevention in government procurement of goods/services as a procurement best practice solution for local and central governments. This can be an opportunity for research on procurement in Indonesia considering that research on government procurement has not yet developed, it is still only an antecedent of e-procurement implementation.

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