

RISK BASED AUDIT AND FRAUD RISK MANAGEMENT

Ika Puteri Amalia¹, Prasetyono², and Tarjo³

¹ikapamalia31@gmail.com, ²prasetyono_akt@trunojoyo.ac.id, ³tarjo@trunojoyo.ac.id

^{1,2,3} *Universitas Trunojoyo Madura*

Abstract: *This study aims to determine the implementation of risk-based auditing and good governance in an effort to fraud risk management at the Madura Regional Inspectorate. This research is a quantitative research with an explanatory approach (explanatory research). The population is internal auditors who are in the Inspectorate Office in the Regency in the Madura area. The sample selection used simple random sampling and obtained a sample of 77 respondents. Primary data was collected through a survey method in two ways, namely by visiting the respondents directly and using the google form. The data were then analyzed using the Smart PLS (Partial Least Square). The results show that the implementation of risk-based audits has an effect on fraud risk management efforts, while good governance has no effect on fraud risk management efforts.*

Keywords: *risk based audit, good governance, fraud risk management*

Introduction

Previous risk management had the goal of maximizing firm value and anticipating bankruptcy (Purnanandam 2008). However, now risk management has been widely adopted by the public sector in several countries such as the United States, Scotland and Korea (Nugraha and Susanto, 2017). According to COSO, risk management is a process carried out by all levels and components of the organization to ensure that organizational goals can be achieved. In other words, the organization has established a strategy to overcome any risks that can hinder the organization's goals. One of the risks that can thwart organizational goals is the risk of fraud. To overcome the fraud risk, there are efforts to manage fraud risk into a condition that can be accepted by the organization or called fraud risk management (COSO, 2016).

Research on fraud risk management has also been carried out in both the private and public sectors, including: (Gesare et al, 2016), (Ohando, 2015), (Hussaini et al, 2018) which recommends the application of fraud risk management in bank financial institutions to cover all loopholes that can create opportunities for fraud. Previous studies have mostly examined financial institutions and private companies that are considered vulnerable to fraud risk, there are still very few researchers who have conducted research on fraud risk management efforts in the public sector, even though currently many frauds are carried out in government institutions. Research on fraud risk management in the government sector has been studied by Dzomira (2015) who concludes that the practice of fraud risk management is effective when applied to the public sector. in the government sector.

Reflecting on the fraud case that resulted in state losses in government organizations, it should be an evaluation of the role of government internal auditors in preventing and detecting fraud. to ensure that the organizational goals that have been designed can be achieved effectively. Muehlmann et al (2010), stated that internal auditors must have a sense of vigilance in auditing parts that have a high risk of fraud. Fraser (2011) also states that internal audit should focus on areas that have a high probability of fraud risk with a risk-based audit approach. All forms of efforts in overcoming the risk of fraud are basically to realize good governance in the government sector. In order to play an effective role in providing confidence in the achievement of government objectives and optimal

supervision and control by applying the principles of good governance and audit assignments must focus on risk identification, risk analysis including fraud risk management. In line with this, Dzomira (2015), also states that good governance and fraud risk management are closely related to the realization of good governance and free from corruption.

This study was conducted to determine the implementation of risk-based audits in fraud risk management efforts supported by the research of Danescu et al (2010) and Nugraheni and Pamungkas (2021). Meanwhile, studies which state that the implementation of risk-based audits is not optimal and less effective was carried out by Nugraha and Susanto (2017) and Ibtida and Pamungkas (2020). Furthermore, this study also wants to know the relationship of good governance in fraud risk management efforts which is supported by research by Asare (2009); Beelde (2006) and Lutui et al (2017). Meanwhile, research by Zomira (2015) shows that fraud risk management in South Africa has not been running effectively which causes poor governance.

Literature Review

1. Cultural Theory of Risk

Cultural Theory of Risk or cultural theory of risk was put forward by Doughlas and Wildavsky (1982). This theory explains the relationship between culture and risk perception. cultural risk theory (Douglas and Wildavsky 1982; Thompson, et al. 1990; Kahan et al., 2010) is a theory that explains that individuals adjust their perception of risk through their cultural evaluation of suspected harmful activities and make policies to address them.

2. Fraud

Statement on Auditing Standards No. 99 defines fraud as an act that results in a material misstatement in the financial statements that are the subject of the audit (AICPA, 2002).

3. Fraud Risk Management

COSO (2016), states that fraud risk management refers to activities designed to identify and develop actions to reduce potential risks in the company.

4. Risk Based Audit

According to KEP-005/AAPI/DPN/2014, risk-based auditing has the meaning that it is part of a government agency and a civil servant appointed to carry out internal oversight and control tasks within the government. Internal auditors must focus on areas that have a high risk of fraud through a risk-based audit approach (AAPI, 2018).

5. Good Governance

The United Nations Development Program (UNDP) (2011) formulates 8 principles that must be applied to realize good governance which are indicators in this research, namely participation, law enforcement, transparency, responsiveness, consensus-oriented, fairness/equality, effectiveness and efficiency, and accountability

Hypothesis

1. Implementation of Risk Based Audit on Fraud Risk Management Efforts

Internal audit must be vigilant in conducting supervision, especially those that have a fairly high risk of fraud (Muehlmann et al, 2017). Fraser (2011) also states that internal audit should focus on areas that are prone to the possibility of a high risk of fraud with a risk-based audit approach. Fraud risk can be managed to a level that is acceptable to the organization through fraud risk management efforts (COSO, 2016). Based on KEP-059/AAPI/DPN/2018 with consideration of the limited resources of the government's internal auditors compared to the increasingly complex and extensive audit assignments that must be carried out, it is necessary to establish a risk-based audit plan.

A risk-based audit is a fraud risk management effort carried out by internal auditors in an effort to reduce regional fraud. The studies that support this research, namely the implementation of risk-based audits with fraud risk management have been studied by Danescu, et al (2010); Nugraheni and Pamungkas (2021); which states that internal auditors have implemented risk-based auditing for efficient risk management. While research by Nugraha and Susanto (2017); Ibtida and Pamungkas (2020) state that risk-based auditing has not been effectively implemented in fraud risk management. So that the first hypothesis is:

H1: Risk-based audit has an effect on fraud risk management efforts.

2. The Influence of Good Governance on Fraud Risk Management Efforts

According to Mardiasmo (2009), the main and most important aspects of good governance are supervision, control, and inspection. Where these aspects refer to the internal audit function that supervises and ensures that the implementation of government has been going well. According to KEP-059/AAIPI/DPN/2018, in order to fully contribute to providing confidence in the achievement of government goals and the implementation of optimal supervision and control for the realization of good governance, audit assignments must focus on risk identification, risk analysis and overall risk management.

Researches that support the relationship between good governance and fraud risk management have been carried out by Asare (2009); Sarens and Beelde (2006); Lutui et al (2017), where good governance and fraud risk management are closely related in achieving effective public sector goals. Meanwhile, according to Zomira (2015) good governance has no effect on fraud risk management efforts. Based on this explanation, the second hypotheses is:

H2: Good Governance has an effect on fraud risk management efforts.

Methods

Quantitative research with an explanatory approach (explanatory research) is used in this study. The object of this research focuses on how to implement risk-based auditing and good governance towards fraud risk management efforts. The population is all internal auditors who are in the Inspectorate Office in the City/Regency in the Madura area. Sampling technique with random sample selection (simple random sampling). The source of data is primary data which is a response in the form of a questionnaire filled out by the object of research, namely the internal auditor at the inspectorate office in four districts in Madura. The survey method was used as the data collection method.

Table 1. Operational variabel

Variable	Dimention
Fraud Risk Management(Y) (KPMG, 2014)	Fraud Prevention
	Fraud Detection
	Fraud Response
Risk Based Audit (X1) (AAIPI, 2018)	Risk Based Audit
Good Governance (X2) (UNDP, 2011)	Participation
	Law enforcement
	Transparency
	Responsiveness
	Consensus oriented
	Fairness/equality

	Effectiveness and efficiency
	Accountability

Findings

Table 2. General description of respondents

No.	Characteristic Respondents	Category	Frequency
1.	Age	a. 20-30 b. 31-40 c. 41-50 d. 51-60	11 27 32 7
2.	Gender	a. Male b. Female	35 42
3.	Education	a. Diploma b. Strata 1 c. Strata 2 d. Lain-lain	0 39 38 0
4.	Position	a. First auditor b. Young auditor c. Middle auditor d. etc	12 53 12 0
5.	Length of work	a. 1-10 b. 11-20 c. 21-30	37 32 8
6.	FRM Training	a. Ever b. Never	77 0

Source: Data processed 2022

a. Validity test

1. Convergen Validity

Table 3. Convergent Validity Test Results

Variable/ Indicator	X1	X2	Y
P1			0.823
P2			0.717
P3			0.887
P4			0.823
P5			0.860
P6			0.726
P7			0.747
P8			0.901
P9			0.874
P10			0.905
P11			0.762
P12	0.809		
P13	0.885		

P14	0.945		
P16	0.886		
P17		0.770	
P18		0.811	
P19		0.932	
P20		0.821	
P21		0.747	
P22		0.884	
P25		0.918	
P26		0.716	

Source: PLS 2021 analysis results

Based on table 3, it is known that the indicators of each latent variable have met the requirements of the convergent validity test, namely having an outer loading value of more than 0.7

2. Discriminant Validity

Table 4. Discriminant validity result test

	X1	X2	Y
X1	0.883		
X2	0.677	0.828	
Y	0.687	0.612	0.823

Source: PLS 2021 analysis results

From table 4, it is known that the squared value of AVE, namely: 0.883, 0.828, and 0.823 is greater than each construct

3. Average Variance Extracted (AVE)

Table 5. Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)
X1	0.799
X2	0.686
Y	0.678

Source: PLS 2021 analysis results

From the table, it is known that the value of the square root of AVE for each construct has a value > 0.5.

b. Reliability test

Table 6. Composite Reliability and Cronbach's Alpha

	Composite Reliability	Cronbach's Alpha
X1	0.934	0.905
X2	0.945	0.935
Y	0.958	0.952

Source: PLS 2021 analysis results

The results of the reliability test in table 6 show that all latent variables have composite reliability values and Cronbach's alpha > 0.7. Thus, all variables are reliable.

c. Evaluation Goodness Of Fit Model

1. R-Square

Table 7. R-square table

Variabel	R-Square
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Y	0.519
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Source: PLS 2021 analysis results

Based on table 7, the R-square value is 0.519 for the Y variable or fraud risk management. This means that fraud risk management is influenced by the independent variables in the study by 51.9%.

2. Q-Square

$$Q^2 = 1 - (1 - (R\text{-Square}))^2$$

$$Q^2 Y = 1 - (1 - 0,519^2)$$

$$= 1 - (1 - 0,270)$$

$$= 0,27$$

This means that the relevance of predictions in this study is 27%.

d. Hypothesis test

Tabel 8. Hypothesis test

	Origin al Sample	Sample Mean	Standard Deviation	T-Statistic s	P Value s	Conclutio n
X1- >Y	0.505	0.511	0.105	4.804	0.000	Accepted
X2 - >Y	0.161	0.157	0.176	0.919	0.359	Rejected

Source: PLS 2021 analysis results

Variable X1 which is a risk-based audit has an effect on variable Y, namely fraud risk management of 0.511, because the T-statistic value is 4.804 which means > 1.96 and the P Values is 0.000 < alpha 0.05, so the hypothesis H1 can be declared accepted.

The X2 variable which is good governance has no effect on the Y variable, namely fraud risk management, because the T-statistic value is 0.919 which means <1.96 and the P Values is 0.359 > alpha 0.05, so that the H2 hypothesis can be declared rejected.

Discussion

1. Effect of Risk Based Audit on Fraud Risk Management

Based on the tests that have been carried out using PLS, it is found that hypothesis 1 is accepted, namely the risk-based audit variable has an effect on the fraud risk management variable. This means that the government's internal auditors in their audit assignments have used a risk-based audit approach as a fraud risk management effort to detect and reduce the possibility of fraud.

These results are supported by research by Danescu et al (2010) and Nugraheni and Pamungkas (2021) which state that risk-based auditing is effective in the fraud risk management process. Meanwhile, studies that state that the implementation of risk-based audits is not optimal and less effective in fraud risk management was carried out by Nugraha and Susanto (2017) and Ibtida and Pamungkas (2020).

2. The Effect of Good Governance on Fraud Risk Management

Based on the tests that have been carried out, it shows that hypothesis 2 is rejected, namely the good governance variable has no effect on the fraud risk management variable. This means that internal auditors have not applied the principles of good governance, so it can be said that fraud risk management efforts through the application of good governance principles have not been effective.

This means that if there is an indication of fraud, the internal auditor does not have the right to do things related to the law, the internal auditor is limited to providing suggestions for improvements to the running of the government so that the local government can immediately respond to it. For this reason, so that internal auditors can carry out their roles optimally in realizing good governance, it is necessary to be supported by all elements in the local government environment, namely the commitment of the top leadership (Regent) and their staff.

These results are supported by research by Dzomira (2015) where poor good governance in South Africa indicates that fraud risk management efforts have not been running effectively and optimally. In contrast to the results of research by Asare (2009), Sarens and Beelde (2006), and Lutui et al (2017), which show that good governance plays an important role in fraud risk management.

Conclusion

1. Risk-based audits have an effect on fraud risk management efforts. This is because the internal auditor in his audit assignment has implemented a risk-based audit as an effort to reduce fraud risk management fraud.
2. Good governance has no effect on fraud risk management efforts. This is due to the lack of application of good governance principles as an effort to fraud risk management in audit assignments carried out by internal auditors.

Suggestion

1. Internal Auditor Internal auditors are expected to be able to implement fraud risk management efforts effectively so that all forms of fraud risk can be detected early. One of them is by optimizing the role of auditors as controllers, not just supervisors, namely by giving warnings and directions if there are indications of irregularities within the local government.
2. Local Government In order for the supervisory function of the inspectorate, especially the role of internal auditors to run optimally, it is necessary to be supported by all elements in the local government, namely the top leadership and staff.

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