

The Influence of Forensic Accounting and Investigative Auditing on Disclosure of State Financial Losses

Amelia Kristina Nasution¹, Afrizal², Wiralestari³

¹Alumni of the Master of Accounting Science at the University of Jambi in 2023,

^{2&3}Faculty of Economics and Business Jambi University – Indonesia

ABSTRACT:-Based on the results of the Corruption Perception Index (CPI) survey, which was reported on the Transparency International website (2022), Indonesia is ranked 110th out of 180 countries with a score of 34. This score has increased, although in the last 3 years it has decreased. Forensic accounting and investigative audits are expected to provide solutions to corruption problems that are commonly found today. This research uses quantitative research methods. In this study, the Independent Variables are Forensic Accounting (X_1) and Investigative Auditing (X_2), and the Dependent Variable in this study is Disclosure of State Financial Losses (Y). The data collection technique is through questionnaires (questions) which are distributed to judges, public prosecutors and investigative auditors who have examined corruption cases in the Jambi Province region in 2020-2022. The results of the analysis show that partially there is no significant effect between forensic accounting on disclosure of state financial losses and there is a significant effect between investigative audits on disclosure of state financial losses, thus H_1 is rejected and H_2 is accepted. Simultaneous testing (together) shows that there is a significant influence between forensic accounting and investigative auditing on disclosure of state financial losses, thus H_3 is acceptable. The results of the analysis in this study found that the effect of forensic accounting and investigative auditing on disclosure of state financial losses was 71.7% and the rest was influenced by other variables not used in this study.

Keywords: forensic accounting, investigative audit, disclosure of state financial losses

I. INTRODUCTION

Based on the results of the Corruption Perceptions Index survey published on the Transparency International website (2022), Indonesia is ranked 110 out of 180 countries with a score of 34. Therefore, the higher the index value of a country, the lower the corruption that occurs in that country. Based on the data announced by the KPK for the last 5 years, it can be seen that the number of corruption cases handled by the KPK that have permanent legal force tends to increase every year, although in the last 3 years it has decreased.

Table 1. Cases that have permanent legal force (Inkracht)

NO	YEAR	NUMBER OF INKRACHT CASES
1.	2018	106
2.	2019	142
3.	2020	109
4.	2021	95
5.	2022	134

Source: <https://www.kpk.go.id/id/publikasi/penanganan-perkara/inkracht> (processed)

The Jambi District Court is the executor of judicial power whose task is to administer justice to uphold law and justice in Jambi province based on Pancasila, with the main duties of receiving, examining and adjudicating and resolving cases at the first level submitted to him and other tasks assigned to him based on statutory regulations.

Based on observations made on the case tracking information system at the Jambi District Court, it was found that the handling of corruption cases that were resolved at the Jambi District Court during 2018-2022 reached an average of 40 cases/year. This shows that there are still quite a lot of corruption cases in Jambi province. Data on the number of cases that have been decided at the Jambi District Court for the last 5 years can be seen in the following table:

Table 2. Cases of Corruption Crimes at the Jambi District Court

NO	YEAR	TOTAL DECISIONS
1.	2018	45
2.	2019	37

3.	2020	38
4.	2021	36
5.	2022	47

Source: Jambi District Court Case Tracing Information System (processed)

The involvement of accounting in efforts to combat these criminal practices is very visible, the development of accounting science is a scientific field, which is not only related to financial accounting, management accounting, cost accounting and auditing. Forensic accounting aims to overcome problems that cannot be resolved through the audit process. In Indonesia, the application of forensic accounting is more dominant from the public sector than the private sector because the number of cases prosecuted is greater in the public sector. The criminal act of corruption that occurred caused the loss of state finances.

At first, forensic accounting was the simplest combination of accounting and law. However, the development of cases has also become increasingly complicated so that there is one additional field that is used besides accounting and law, namely auditing. An auditor tries to see weaknesses in the internal control system, especially at points that are prone to fraud. Audit findings that are the result of an audit work can be in the form of accusations or complaints from other parties, the auditor will be reactive to the audit findings, accusations and complaints.

Auditors are required to use their expertise like an investigator, using more intuition and accuracy in determining deviations that may occur in the field. An investigative audit is part and the initial stage of forensic accounting as a whole, being more reactive to findings that indicate fraud. This expertise must be possessed by an auditor. Thus, forensic accounting is needed to solve corruption problems that are common in today's society. In a study conducted by Fatah et al. (2017), it was found that the authority of institutions or parties who are competent to calculate state financial losses is not stated clearly and unequivocally in the Corruption Crime Eradication Law. However, in practice the institutions or parties that are often involved by law enforcement officials in calculating losses to state finances are the Supreme Audit Agency and the Financial and Development Supervisory Agency. In addition, this study found that investigative audits have an effect on disclosing fraudulent financial reporting.

A similar study was conducted by Ihulhaq et al. (2019) on BPKP auditors, it was found that the research results obtained were forensic accounting and investigative audits which proved to have a significant positive effect on fraud detection. Forensic accounting and investigative auditing are very useful for auditors as audit procedures are effective in detecting fraud. Another phenomenon was found in the research by Raharjo et al. (2020) with respondents, namely Analysts and Examiners of Financial Transactions at the Center for Financial Transaction Reports and Analysis, the results showed that forensic accounting has a significant effect on the detection of suspected money laundering crimes, while investigative audits have no effect on the detection of suspected money laundering crimes.

The results of this study are in line with what was stated by Ryketeng (2020) there are differences of opinion in terms of the amount of financial losses for state losses calculated by the Bantul Regency Inspectorate, BPKP Representative for the Special Region of Yogyakarta and the Panel of Judges at the Corruption Crime Court at the Yogyakarta District Court.

There are still many studies that should contribute to the development of forensic accounting, including research conducted by DiGabriele et al. (2020), he suggested that subsequent research could provide insight into how facts in court, judges and juries see the professional contribution of forensic accountants. Research that has been conducted by Mohamad (2020) found that forensic accounting plays an important role in improving law enforcement in England.

II. THEORETICAL FRAMEWORK AND HYPOTHESIS

A. Forensic Accounting

Forensic accounting refers to a comprehensive view of fraud investigation, including preventing fraud and analyzing anti-fraud controls. Forensic accounting will include fraud audits of accounting records and looking for evidence of fraud (Singleton & Singleton, 2010). However, certain accounting knowledge and skills are required in the specialized field of forensic accounting. A forensic accountant who specializes in investigating fraud will likely need specific knowledge and skills related to accounting information systems, digital forensics, and accounting information system audit procedures (Crain et al., 2015).

Another study related to forensic accounting was conducted by Alshurafat et al. (2021), found that forensic accounting is considered a vital field of science because it combines knowledge including, accounting, auditing, law, finance, information technology and criminology. A successful forensic accountant must possess a set of skills, including analytical, communication and investigative skills. The results of Prayoga & Syam's research (2021) found that the competence and experience of an auditor have a significant effect on their ability to detect fraud. In addition, an auditor's professional skepticism moderated by forensic accounting has a significant effect

on his ability to detect fraud. Forensic accounting is the application of the discipline of accounting in its broadest sense, including auditing of legal issues for legal settlement inside or outside the court, in the public and private sectors. Forensic accounting standards are not identical or unrelated to accounting in accordance with generally accepted accounting principles (GAAP). The standards used are not GAAP, but things that according to law or statutory provisions are correct and accurate (Tuanakotta, 2014).

B. Investigative Audits

Rufus et al. (2015) explained that forensic accounting investigations cover all forensic accounting involvement that involves litigation at an early stage. Investigation is defined as a systematic inquiry, search, or research to obtain facts about certain or general matters. According to Sumartono et al. (2020) that in disclosing fraud in the public sector in Indonesia, the investigative skills and business judgments of forensic accountants have a significant and positive effect.

Similar research was also carried out by Wahyuni-TD et al., (2021), it was found that the involvement and responsibility of all parties (the public, employees and management of zakat institutions) play an important role in monitoring fraud prevention and the successful application of forensic accounting. With improved governance in zakat institutions it can be ensured that socio-economic justice is achieved, and the absence of fraudulent practices can improve the performance of zakat institutions. According to Tuanakotta (2014), the term investigative audit confirms that its implementation is deeper and often extends to auditing matters that are not touched or not touched by a general auditor financial audit (general auditor independent audit).

C. Disclosure

The word "disclosure" according to KBBI is defined as a process, method, act of disclosing. Therefore, the information must be complete, clear, accurate and reliable, describing the condition of the company that is exposed, and financial and other information, so that no party is harmed.

State financial losses can occur due to various things, such as corruption, abuse of authority, or administrative errors. The definition of state losses according to law includes not only reduced state money or assets but also related to other things that can be detrimental to state finances (Astuti & Chariri, 2015).

According to Sayyid in Suryani et al. (2021) investigative audit is a form of audit activity that includes examinations that aim to identify carefully in disclosing financial fraud by using methods, audit procedures, and techniques commonly used in financial crime investigations. According to Rozali & Darliana (2015) that forensic accountants in carrying out their duties to reveal a case through several stages, namely predication, formulation of hypotheses, data gathering, data reliability testing, data analysis, summons, interviews and interrogations, calculation of losses and reports of investigative audit findings .

D. State Financial Losses

Losses in the perspective of economics are explained by the concept of well-offness or better-offness, meaning wealth or property (a person, country, company, etc.) at a point in time compared to wealth or possessions at a point in time before or after (Tuanakotta, 2018). From the perspective of state administrative law, the meaning of loss can be seen in Law no. 1 of 2004 concerning the State Treasury. Article 1 paragraph (22) states that state/regional losses are a real and definite lack of money, securities and goods as a result of unlawful acts, whether intentional or negligent (Republic of Indonesia, 2004). The elucidation of Article 32 paragraph (1) states what is meant by "there has actually been a loss of state finances" is a loss whose amount can be calculated based on the findings of the competent authority or the appointed public accountant. This means that the amount of loss incurred has been calculated by the competent authority or appointed public accountant and set forth in the inspection report (Republic of Indonesia, 2001). Based on Law Number 17 of 2003 concerning State Finance, in Article 1 paragraph (1) states that State Finance is all state rights and obligations that can be valued in money, as well as everything both in the form of money and in the form of goods that can be owned by the state in connection with implementation of these rights and obligations (Republic of Indonesia, 2003). This means that the amount of loss incurred has been calculated by the competent authority or appointed public accountant and set forth in the inspection report (Republic of Indonesia, 2001). Based on Law Number 17 of 2003 concerning State Finance, in Article 1 paragraph (1) states that State Finance is all state rights and obligations that can be valued in money, as well as everything both in the form of money and in the form of goods that can be owned by the state in connection with implementation of these rights and obligations (Republic of Indonesia, 2003). This means that the amount of loss incurred has been calculated by the competent authority or appointed public accountant and set forth in the inspection report (Republic of Indonesia, 2001). Based on Law Number 17 of 2003 concerning State Finance, in Article 1 paragraph (1) states that State Finance is all state rights and obligations that can be valued in money, as well as everything both in the form of money and in the form of goods that can be owned by the state in connection with implementation of these rights and obligations (Republic of Indonesia, 2003).

E. Calculation of State Financial Losses

Based on research by Astuti & Chariri (2015) it was found that the calculation of state losses can be calculated by calculating the difference between what should be and what is actually earned or spent. This difference can be said to be misstatement because it has different final calculation results. However, this difference should be reassessed using the concept of materiality. BPK has a special standard in the form of Technical Guidelines for Determining BPK Materiality Limits in 2013.

Determination of the exact amount of state financial losses in corruption cases pending a decision in a district court based on evidence at trial (amount of state financial losses or financial losses calculated by an authorized official or expert). State officials or experts can change (in the sense that they can add, subtract, or even lose/declare no loss) if the evidence obtained during the trial truly supports this conclusion (Ryketeng, 2020).

F. Act against the law

Article 2 paragraph (1) Law Number 31 of 1999 jo. Law Number 20 of 2001 concerning the Eradication of Corruption Crimes which reads: "Any person who unlawfully commits an act of enriching himself or another person or a corporation that can harm the state's finances or the country's economy, shall be sentenced to life imprisonment or a fine imprisonment for a minimum of 4 (four) years and a maximum of 20 (twenty) years and a fine of at least Rp. 200,000,000.00 (two hundred million rupiah) and a maximum of Rp. 1,000,000,000.00 (one billion rupiah)."

Explanation of the law: What is meant by "unlawfully" in this Article includes acts against the law in the formal sense as well as in the material sense, that is, even though the said act is not regulated in statutory regulations, if the act is considered disgraceful because it is not in accordance with sense of justice or the norms of social life in society, then the act can be punished. In this provision, the word "may" before the phrase "harm the country's finances or economy" indicates that the criminal act of corruption is a formal offense, namely the existence of a criminal act of corruption is sufficient to fulfill the elements of the act that have been formulated not by the emergence of consequences (Amiruddin, 2010).

G. Proof With Forensic Accounting

Based on the book of the Criminal Procedure Code (KUHAP) of the Republic of Indonesia (1981) it is not explained in detail regarding the meaning of evidence, but Article 183 states that "A judge may not impose a sentence on a person unless with at least two valid evidences he obtain conviction that a crime has actually occurred and that it is the accused who is guilty of committing it." Article 184 paragraph (1) of the Criminal Procedure Code explains that valid evidence is: Witness statements, expert statements, letters, instructions and statements of the accused.

According to Tuanakotta (2018) that when a crime has material losses, forensic accountants can be involved to calculate the amount of losses caused by the crime. The forensic accountant acts as an expert witness who provides expert testimony. Therefore, the role of the forensic accountant as an expert witness is very important in proving a crime, because the expert's statement provided by the forensic accountant both at the investigation stage and at the examination stage by the judge in the trial can be used as legal evidence for criminal acts. corruption that causes material losses. According to McGlone (2021), a forensic accountant as an expert witness often helps in the discovery, reporting and testimony process in a case.

The hypothesis can be interpreted as a temporary answer to the formulation of the problem as outlined in the form of a question. The provisional answers given are only based on relevant theory and not on empirical evidence obtained through data collection and analysis, the researcher makes assumptions based on the formulation of the problem and research objectives and then makes a hypothesis.

Based on the theoretical concepts and previous framework, the researchers formulated the hypothesis in this study as follows:

H1: Forensic accounting has a significant effect on the disclosure of state financial losses.

H2: Investigative audit has a significant effect on disclosure of state financial losses.

H3: Forensic accounting and investigative auditing have a significant effect on the disclosure of state financial losses.

III. RESEARCH METHODOLOGY

A. Data and Samples

The population in this study consisted of law enforcement officials who had direct contact with corruption cases, the total population was 18 judges and 35 public prosecutors (public prosecutors from the Attorney General's Office and the KPK) who had examined corruption cases in Jambi Province. . This study

used a purposive sampling technique. Determination of sources of informants/respondents is based on specific aims and objectives. In this case the samples taken were judges and public prosecutors (public prosecutors from the Attorney General's Office and the KPK) who were still proceeding in corruption cases in Jambi Province. In this study, the criteria for sampling techniques were based on the following: law enforcement officials who have investigated corruption cases in Jambi province during the 2020-2022 period. And the auditor for the Jambi Province BPKP Representative in the investigative field. The number of samples in this study were 64 people consisting of 18 judges and 35 public prosecutors (public prosecutors from the Attorney General's Office and the Corruption Eradication Commission) who had examined corruption cases in Jambi Province and investigative auditors from the Financial and Development Supervisory Agency (BPKP). Representatives of Jambi Province as many as 11 people.

B. Research Models

This research uses quantitative research methods. This research is directed to determine the relationship between two or more variables. The formulation of research problems that are asking the relationship between two or more variables, the formulation of the problem in this study is called associative problem formulation. This study uses data collection techniques through a questionnaire (questionnaire). Questionnaires will be distributed to the research sample, namely judges and public prosecutors who have met predetermined purposive sampling criteria. Submission of questionnaires via Google form, considering that during the pandemic it was not possible to deliver questionnaires directly to prospective respondents/informants. In addition, interviews will also be conducted with several respondents to obtain more in-depth information about the issues in the research. The measurement scale used in this study is the Likert scale. The data analysis technique used in this study was multiple linear regression analysis and hypothesis testing using the Statistical Product and Service Solution (SPSS) version 25 program. The regression model in this study can be seen in the image below:

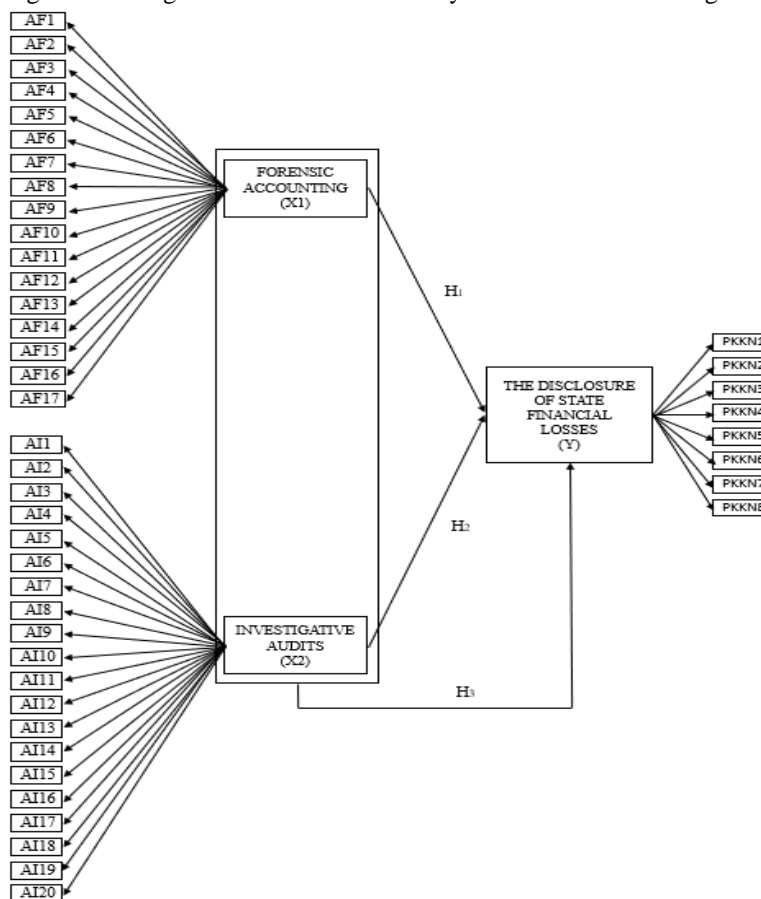


Figure 1. Research Model

The regression equation in this study can be formulated as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

Information:

Y = Disclosure of State Financial Losses

α = Constant

- $\beta_1\beta_2$ = Regression coefficient
- X1 = Forensic Accounting
- X2 = Investigative Audit
- e = errors

C. Operationalization of Research Variables

Variable measurement in this study uses 3 variables, namely Forensic Accounting (X1), Investigative Audit (X2) and Disclosure of State Financial Losses (Y). An explanation of the operational variables can be seen as follows:

Table 3. Variable Operationalization

VARIABLE	DIMENSIONS	INDICATOR	SCALE
Forensic Accounting (X1)	a. Basic skills, and analysis	<ol style="list-style-type: none"> 1. Education in Accounting and Auditing. 2. Internal Control Techniques 3. Communication. 4. Investigation and fraud knowledge, investigative audit techniques and how to obtain evidence. 5. Maintain confidentiality of information sources. 6. Relevant and competent evidence knowledge. 7. Information and technology issues. 8. Professional and critical skepticism. 9. Broadminded. 10. Obey the rules. 	Likert
	b. Technical Capability	<ol style="list-style-type: none"> 1. Laws and regulations. 2. Critical investigative and analytical skills. 3. Theories, methods and patterns of fraud. 4. Design inspection. 5. Track and monitor network resources and data. 6. Give gifts to reporters of fraud 7. Bring in expert witnesses. 	
Investigative Audits (X2)	a. Basic skills, and analysis	<ol style="list-style-type: none"> 1. Education in Accounting and Auditing. 2. Internal Control Techniques 3. Communication. 4. Investigation and fraud knowledge, investigative audit techniques and how to obtain evidence. 5. Maintain confidentiality of information sources. 6. Relevant and competent evidence knowledge. 7. Information and technology issues. 8. Professional and critical skepticism. 9. Broadminded. 10. Obey the rules. 	Likert
	b. Technical Capability	<ol style="list-style-type: none"> 1. IT expert 2. Legal construction (law). 3. Corruption knowledge. 4. Objective, independent, neutral and presumption of innocence. 5. Make a hypothesis. 6. The data proves the hypothesis 	

	c. Mental Attitude	1. investigative auditing standards. 2. Independent. 3. Be free with professional skepticism. 4. Critical.	
Disclosure of State Financial Losses (Y)	a. Disclosure Techniques.	1. Division of tasks 2. audit scope 3. Methodology	Likert
	b. Disclosure procedures	1. Audits or investigations upon request. 2. Procedure for disclosing fraud is written and standardized. 3. Evidence gathering. 4. Fraud disclosure and reporting procedures 5. Processing and taking action against perpetrators of fraud.	

IV. RESULTS

A. Results of Research Instrument Test Analysis

Analysis of the respondent's response data can be used to enrich the discussion, by explaining how well each variable indicator is, making it easier to interpret the variables studied.

1. Validity test

The validity test aims to measure whether the variables used are valid or not. This test was carried out using Pearson correlation, a model is considered valid if the significance level is less than 0.05, then every statement that becomes this indicator can be said to be valid. The table below shows the results of testing the validity of the three variables used in this study. Each indicator that becomes a statement on the forensic accounting variable meets the valid criteria with a significance value of less than 0.05 (Sig 2-tailed <0.05).

Table 4. Forensic Accounting Variable Validity Test Results

INDICATOR	R COUNT	R TABLE	SIG. (2-TAILED)	INFORMATION
X1.1	0.384	0.2500	0.002	Valid
X1.2	0.711	0.2500	0.000	Valid
X1.3	0.734	0.2500	0.000	Valid
X1.4	0.729	0.2500	0.000	Valid
X1.5	0.506	0.2500	0.000	Valid
X1.6	0.498	0.2500	0.000	Valid
X1.7	0.637	0.2500	0.000	Valid
X1.8	0.653	0.2500	0.000	Valid
X1.9	0.676	0.2500	0.000	Valid
X1.10	0.603	0.2500	0.000	Valid
X1.11	0.479	0.2500	0.000	Valid
X1.12	0.738	0.2500	0.000	Valid
X1.13	0.721	0.2500	0.000	Valid
X1.14	0.735	0.2500	0.000	Valid
X1.15	0.675	0.2500	0.000	Valid
X1.16	0.509	0.2500	0.000	Valid
X1.17	0.609	0.2500	0.000	Valid

Table 5. Investigative Audit Variable Validity Test Results

INDICATOR	R COUNT	R TABLE	SIG. (2-TAILED)	INFORMATION
X2.1	0.498	0.2500	0.000	Valid
X2.2	0.777	0.2500	0.000	Valid
X2.3	0.796	0.2500	0.000	Valid
X2.4	0.812	0.2500	0.000	Valid
X2.5	0.528	0.2500	0.000	Valid
X2.6	0.818	0.2500	0.000	Valid
X2.7	0.704	0.2500	0.000	Valid
X2.8	0.827	0.2500	0.000	Valid

X2.9	0.753	0.2500	0.000	Valid
X2.10	0.653	0.2500	0.000	Valid
X2.11	0.501	0.2500	0.000	Valid
X2.12	0.569	0.2500	0.000	Valid
X2.13	0.385	0.2500	0.002	Valid
X2.14	0.727	0.2500	0.000	Valid
X2.15	0811	0.2500	0.000	Valid
X2.16	0.862	0.2500	0.000	Valid
X2.17	0.816	0.2500	0.000	Valid
X2.18	0.830	0.2500	0.000	Valid
X2.19	0.793	0.2500	0.000	Valid
X2.20	0.763	0.2500	0.000	Valid

Table 6. Results of the Validity Test of Disclosure of State Financial Losses Variables

INDICATOR	R COUNT	R TABLE	SIG. (2-TAILED)	INFORMATION
Y1	0.830	0.2500	0.000	Valid
Y2	0.755	0.2500	0.000	Valid
Y3	0.703	0.2500	0.000	Valid
Y4	0.793	0.2500	0.000	Valid
Y5	0.791	0.2500	0.000	Valid
Y6	0.764	0.2500	0.000	Valid
Y7	0.729	0.2500	0.000	Valid
Y8	0.556	0.2500	0.000	Valid

2. Reliability Test

Reliability testing data for each variable with Cronbach's alpha > 0.6. It can be concluded that the three variables in this study are reliable

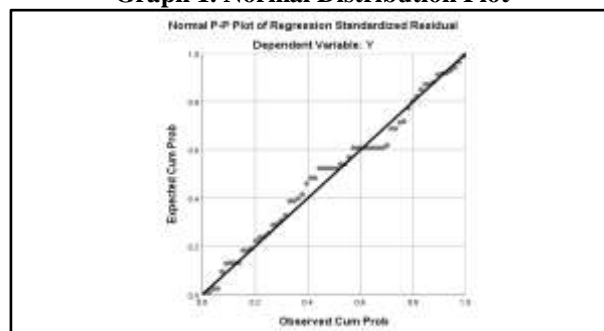
Table 7. Reliability Test Results

VARIABLE	CRONBACH'S ALPHA	INFORMATION
Forensic Accounting (X1)	0.880	Reliable
Investigative Audit (X2)	0.940	Reliable
Disclosure of State Financial Losses (Y)	0.852	Reliable

3. Classic assumption test

There are several steps before carrying out a multiple linear regression analysis. The tests that must be carried out to actually get the results of data processing which are the research objectives are the normality test, autocorrelation test, multicollinearity test, and heteroscedasticity test.

Graph 1. Normal Distribution Plot



In the graph above it can be seen that the data is normally distributed, because the points that interpret the residual values of each respondent are distributed close to and across the diagonal line.

Table 8. Autocorrelation Test Results

Summary model ^b					
Model	R	R Square	Adjusted R Square	std. Error of the Estimate	Durbin-Watson
1	.847 ^a	.717	.707	2.12466	1,769
a. Predictors: (Constant), X2, X1					
b. Dependent Variable: Y					

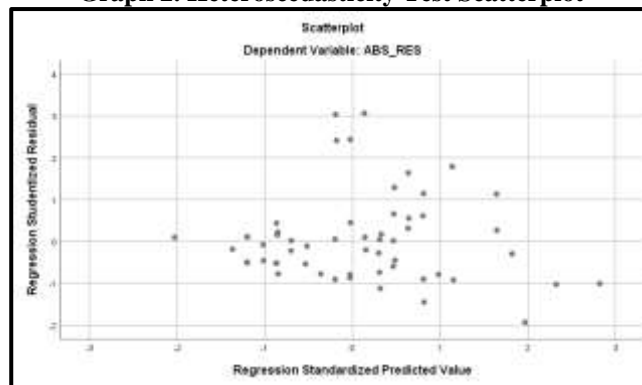
Table 8. shows that the results of the calculation of the autocorrelation test regression analysis with a Durbin-Watson (DW) value of 1.766. Observations on the Durbin-Watson table with the assumption that the number of samples (n) is 62 and the number of independent variables (k) is 2, resulting in a DL value of 1.5232 and a DU value of 1.6561. Based on these data, $DU < DW < 4-DU$ or with a value of $1.6918 < 1.769 < (4-1.6561 = 2.3439)$, so it can be concluded that there is no autocorrelation.

Table 9. Multicollinearity Test Results

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	std. Error	Betas			tolerance	VIF
1	(Constant)	-3,683	3,496		-1,053	.296		
	X1	.136	.102	.208	1,336	.187	.198	5041
	X2	.318	.075	.656	4.215	.000	.198	5041
a. Dependent Variable: Y								

Table 9 shows the results of the multicollinearity test analysis with a tolerance value of 0.198 and a VIF of 5.041. The VIF value is less than (<) 10 and the tolerance value is more than (>) 0.1 so it can be concluded that there is no multicollinearity.

Graph 2. Heteroscedasticity Test Scatterplot



Observations on the results of the heteroscedasticity test analysis in graph 2. show that the points on the graph do not show a particular pattern, so it can be concluded that there is no heteroscedasticity in this regression model.

B. Hypothesis Test Results

1. Statistical t-test

Table 10. Table of Statistical t-test results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	-3,683	3,496		-1,053	.296

X1	.136	.102	.208	1,336	.187
X2	.318	.075	.656	4.215	.000
a. Dependent Variable: Y					

The results of the statistical t-test obtained the t-value of the variable X1 of 1.336 and X2 of 4.215. It is known that if the t-count value of the forensic accounting variable (X1) is $1.336 < 2.001$ (t-Table), it can be concluded that forensic accounting has no significant effect on the disclosure of state financial losses. While the test results on the investigative audit variable (X2) are $4.215 > 2.001$ (t-Table), this means that there is a significant influence between investigative audits on disclosure of state financial losses. Thus H1 is rejected and H2 is accepted.

2. Statistical F Test

Table 11. Statistical F Test Results

ANOVA ^a						
Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	674,439	2	337,219	74,703	.000b
	residual	266,336	59	4,514		
	Total	940,774	61			
a. Dependent Variable: Y						
b. Predictors: (Constant), X2, X1						

Based on the statistical F-test, it is known that F Count > F Table, namely $74.703 > 3.15$, so it can be concluded that simultaneously (together) there is an effect of forensic accounting (X1) and investigative auditing (X2) on disclosure of state financial losses (Y) significantly. Thus H3 can be accepted.

3. Determinant Coefficient Test (R²)

Table 12. Determinant Coefficient Test Results

Summary model ^b				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.847 ^a	.717	.707	2.12466
a. Predictors: (Constant), X2, X1				
b. Dependent Variable: Y				

Based on the output in table 12 above, it is known that the R² value is 0.717, meaning that the effect of variables X1 and X2 simultaneously (together) on variable Y is 71.7% and the rest is influenced by other variables not present in this study.

V. DISCUSSION

Based on the statistical analysis performed on the data obtained, it was found that forensic accounting has no significant effect on disclosing state financial losses. The t-statistical test was conducted to test the significance of the effect of forensic accounting partially on the disclosure of state financial losses. According to Bologna and Lindquist in Tuanakotta (2014) states that the role of forensic accountants begins when evidence has been collected or when suspicions rise to the surface through accusations, complaints, findings or instructions from whistleblowers. One of the factors that makes fraud detection difficult for forensic accounting in Indonesia is due to complexity. Fraudulent activities can be very complex and difficult to detect, especially when it involves several parties or complicated transactions Suhartono & Jannah (2021). This research is supported by previous studies, such as those conducted by Andriani et al. (2020) which states that the Makassar City Financial and Development Supervisory Agency has auditors who lack the ability to use forensic accounting techniques, forensic accounting knowledge, legal knowledge needed to identify fraud. Sumartono et al. (2020) found that the skills of forensic accountants in uncovering fraud in the public sector were influenced by investigative skills and business judgment skills, and research by Achyarsyah & Rani (2020) found that forensic accounting could not identify the

possibility of fraud earlier, which is why forensic accounting had no effect on disclosure of fraudulent financial reporting.

Investigative audits can assist in identifying potential fraud and discrepancies in government financial reports and provide recommendations for improving internal control as a first step in minimizing fraud. Because law enforcement agencies do not have their own forensic accountants (in-house), at a later stage, in the investigation process, they interact with related agencies such as the BPK, BPKP, and KAP. Forensic accountants are expected to calculate the amount of state financial losses (Tuanakotta, 2018). Tuanakotta (2014) states that investigative audits are carried out in more depth and often also include a review of facts that are not touched on or not mentioned in the audit report. The purpose of an investigative audit is to demonstrate the presence or absence of fraud (including corruption) and other illegal activities (eg money laundering). The key to the success of investigative audit techniques lies in the ability of the auditor to understand well the problem to be solved, mastery of good investigative audit techniques allows the application of techniques to be used appropriately, carry out the application of audit techniques carefully, and be careful in interpreting findings or drawing conclusions from the results of the application selected audit technique. This research is supported by previous studies, such as those conducted by Ihulhaq et al. (2019) who concluded that investigative auditor skills have a strong impact on the effectiveness of carrying out audit procedures. Wiharti & Novita (2020) found that the investigative auditor BPKP DKI Jakarta saw the need to carry out investigative audits that included the application of investigative audit skills and investigative audit standards, which would have a positive impact on efforts to increase the success of detecting failures in the procurement of goods and services, and S.W & Kuntadi (2022) states that a competent investigative audit that is able to carry out appropriate audit procedures has a positive and significant effect on the effectiveness of fraud disclosure.

An investigative audit aims to find an event/event/transaction that indicates fraud, or can generate sufficient confidence and be used as evidence that ensures the truth in explaining previously suspected events to achieve justice (search of the truth) (Sudarmo et al., 2008). An investigative audit involves reviewing financial documentation for specific purposes, which can relate to litigation support and insurance claims as well as criminal matters (Singleton & Singleton, 2010). Forensic accounting refers to a more comprehensive view, including auditing accounting records to look for evidence of fraud. Investigations in forensic accounting aim to prove or disprove alleged allegations or allegations. Further forensic accounting responsibilities include writing reports to management or courts, and serving as expert witness and litigation support (Singleton & Singleton, 2010). When an expert witness is in court, whether for defense or prosecution, the jury considers that the financial statements that have been examined are more reliable (Lakhani, 2019). Therefore, forensic accountants must stay abreast of technological developments, technological advances are very important for fraud detection and prevention in fighting fraud because the field of forensic accounting is a field of special expertise with global demand in helping institutions track assets and uncover financial fraud (McGlone, 2021). This research is supported by previous studies, such as those conducted by Fauzan et al. (2015) who found that forensic accounting and investigative auditing jointly have an influence and are able to explain changes in fraud disclosures. In their research, Wuysang et al. (2016) concluded that preventive efforts (prevention) against fraud (corruption) are more effective than carrying out repressive efforts (detention).

By combining these two approaches, disclosure of state financial losses can be more effective and comprehensive. Forensic accounting and investigative audit complement each other in identifying indications of fraud, gathering strong evidence, analyzing data with more sophisticated methods, and preparing detailed reports. Collaboration between forensic accounting practitioners and investigative auditors can produce greater synergy in disclosing fraud or unethical practices in managing state finances. Strong collaboration between professionals in this field can help the government reduce the risk of loss of state finances and increase transparency and accountability in managing public finances.

VI. CONCLUSION

Overall implementation of forensic accounting and investigative auditing in the public sector environment faces various challenges. This study aims to determine and analyze the effect of forensic accounting and investigative audits on disclosure of state financial losses.

In the previous discussion chapter, an analysis of the respondent's data has been carried out so that the researcher can draw several conclusions, as follows:

1. Forensic accounting has no significant effect on disclosure of state financial losses.
2. Investigative audits have a significant effect on disclosure of state financial losses.
3. Forensic accounting and investigative auditing have a significant effect on the disclosure of state financial losses.

The results of the analysis in this study found that the effect of forensic accounting and investigative auditing on disclosure of state financial losses was 71.7% and the rest was influenced by other variables not used in this study.

REFERENCES

- [1]. Achyarsyah, P., & Rani, M. (2020). Pengaruh Akuntansi Forensik Dan Audit Investigatif Terhadap Pengungkapan Kecurangan Pelaporan Keuangan (Studi pada Badan Pemeriksa Keuangan Republik Indonesia). *Jurnal Ilmu Akuntansi*, Vol.18(No.2).
- [2]. Akinbowale, O. E., Klingelhöfer, H. E., & Zerihun, M. F. (2020). An innovative approach in combating economic crime using forensic accounting techniques. *Journal of Financial Crime*, Vol.27(No.4), 1253–1271. <https://doi.org/10.1108/JFC-04-2020-0053>
- [3]. Alshurafat, H., Al Shbail, M. O., & Mansour, E. (2021). Strengths and weaknesses of forensic accounting: an implication on the socio-economic development. *Journal of Business and Socio-Economic Development*, Vol.1(No.2), 135–148. <https://doi.org/10.1108/jbsed-03-2021-0026>
- [4]. Alzahrane, M. (2022). Personal Skills and Educational Qualifications for Practicing Forensic Accountants in Saudi Courts: Exploratory and Qualitative Semi-Structured Interviews. *Journal of Forensic and Investigative Accounting*, Volume 14(Issue 1), 151–166.
- [5]. Amiruddin. (2010). *Korupsi Dalam Pengadaan Barang Dan Jasa*. Yogyakarta: Genta Publishing.
- [6]. Andriani, Rahmawati, & Kasran, M. (2020). Pengaruh Akuntansi Forensik dan Audit Investigasi Terhadap Pengungkapan Fraud (Studi pada Kantor BPKP di Kota Makassar). Universitas Muhammadiyah Palopo.
- [7]. Antoni, R., Diah, E., & Mansur, F. (2021). Faktor-Faktor Yang Mempengaruhi Terjadinya Kecenderungan Kecurangan (Fraud) Di Sektor Pemerintahan (Studi Empiris Pada Dinas-Dinas Di Provinsi Jambi). *Jambi Accounting Review (JAR)*, 2(April), 1–13.
- [8]. Astuti, C. A., & Chariri, A. (2015). Penentuan Kerugian Keuangan Negara yang Dilakukan Oleh BPK dalam Tindak Pidana Korupsi. *Diponegoro Journal Of Accounting*, Vol. 4(No. 3), 1–12.
- [9]. Bressler, L. (2012). The role of forensic accountants in fraud investigations : Importance of attorney and judge's perceptions. *Journal of Finance and Accountancy*, Vol.9, 1–9.
- [10]. Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods (Twelfth Ed)*. New York: McGraw-Hill/Irwin.
- [11]. Crain, M. A., Hopwood, W. S., Pacini, C., & Young, G. R. (2015). *Essentials Of Forensic Accounting (1st ed.)*. John Wiley & Sons, Inc.
- [12]. DiGabriele, J. A., Heitger, L. E., & Riley, R. (Dick). (2020). A Synthesis of Non-Fraud Forensic Accounting Research. *Journal of Forensic Accounting Research*, Vol.5(No.1), 257–277. <https://doi.org/10.2308/jfar-19-034>
- [13]. Effendy, M. (2010). *Korupsi dan Pencegahan*. Jakarta: Timpani.
- [14]. Fatah, A., Jaya, N. S. P., & Juliani, H. (2017). Kajian Yuridis Penerapan Unsur Merugikan Keuangan Negara Dalam Penegakan Hukum Tindak Pidana Korupsi. *Diponegoro Law Journal*, Vol.6(No.1), 1–15.
- [15]. Fauzan, I. A., Purnamasari, P., & Gunawan, H. (2015). Pengaruh Akuntansi Forensik dan Audit Investigasi terhadap Pengungkapan Fraud (Studi Kasus pada Badan Pengawasan Keuangan dan Pembangunan (BPKP) Perwakilan Jawa Barat). *Prosiding Akuntansi Universitas Islam Bandung*, Vol.1(No.2).
- [16]. Fuady, M. (2013). *Perbuatan Melawan Hukum: Pendekatan Kontemporer*. Bandung: PT. Citra Aditya Bakti.
- [17]. Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25 (Ed.9)*. Badan Penerbit Universitas Diponegoro.
- [18]. Hamid, R. S., & Anwar, S. M. (2019). *Structural Equation Modeling (SEM) Berbasis Varian: Konsep Dasar dan Aplikasi dengan Program SmartPLS 3.2.8 dalam Riset Bisnis*. Jakarta: PT Inkubator Penulis Indonesia.
- [19]. Ihulhaq, N., Sukarmanto, E., & Purnamasari, P. (2019). Pengaruh Akuntansi Forensik dan Audit Investigasi terhadap Pendeteksian Fraud. *Prosiding Akuntansi Universitas Islam Bandung*, Vol.5(No.2).
- [20]. Kurniawan, A. W., & Puspitaningtyas, Z. (2016). *Metode Penelitian Kuantitatif*. Yogyakarta: Pandiva Buku.
- [21]. Kurniawan, R., & Yuniarto, B. (2016). *Analisis Regresi: Dasar dan Penerapannya dengan R*. Jakarta: Kencana Prenadamedia Group.
- [22]. Lakhani, S. (2019). The influence of expert witnesses on jurors' decision-making in an accounting context. *Journal of Forensic and Investigative Accounting*, Vol.11(No.1), 24–32. <http://web.nacva.com/JFIA/Issues/JFIA-2019-No1-2.pdf>
- [23]. Lestari, I. P., Widaryanti, & Sukanto, E. (2019). Penerapan Akuntansi Forensik, Audit Investigatif, Efektivitas Whistleblowing System dan Pencegahan Fraud pada Kantor Perwakilan BPKP Provinsi

- Jawa Tengah. Prosiding Seminar Nasional Mahasiswa Unimus, Vol. 2, 558–563.
- [24]. Makawimbang, H. F. (2014). Kerugian Keuangan Negara Dalam Tindak Pidana Korupsi, Suatu Pendekatan Hukum Progresif. Yogyakarta: Thafa Media.
- [25]. Makawimbang, H. F. (2015). Memahami Dan Menghindari Perbuatan Merugikan Keuangan Negara Dalam Tindak Pidana Korupsi Dan Pencucian Uang. Yogyakarta: Thafa Media.
- [26]. Maryani, N., & Sastradipraja, U. (2022). Peranan Audit Investigatif dalam menjadikan Bukti Audit sebagai Bukti Hukum untuk Pembuktian Tindak Pidana Korupsi. *Portofolio: Jurnal Ekonomi, Bisnis, Manajemen, Dan Akuntansi*, 17(2), 1–32. <https://doi.org/10.54783/portofolio.v17i2.199>
- [27]. McGlone, N. (2021). Expert Witness In The Field Of Forensic Accounting. *Journal of Forensic and Investigative Accounting*, Volume 13(Issue 3), 460–465.
- [28]. Mohamad, I. S. (2020). Exploring The Role Of Forensic Accounting In Law Enforcement “A Case Study From The UK.” *International Journal of Psychosocial Rehabilitation*, Vol. 24(Issue 06), 7779–7790.
- [29]. Prayoga, M. N., & Syam, M. A. (2021). Determinasi Kemampuan Deteksi Kecurangan di Bidang Tindak Pidana Korupsi dengan Akuntansi Forensik sebagai Pemoderasi. *Jurnal Riset Akuntansi Dan Perpajakan*, Vol.8(No.01), 136–149.
- [30]. Purnomo, R. A. (2016). Analisis Statistik Ekonomi dan Bisnis Dengan SPSS (Cet,1). CV. Wade Group.
- [31]. Raharjo, T. P., Djaddang, S., & Supriyadi, E. (2020). Peran Kode Etik Atas Pengaruh Akuntansi Forensik, Audit Investigatif dan Data Mining Terhadap Pendeteksian Dugaan Tindak Pidana Pencucian Uang. *Jurnal Riset Akuntansi Dan Perpajakan*, Vol. 7(No. 2), 219–234.
- [32]. Rais, M. (2017). Nilai Keadilan Putusan Hakim Pada Perkara Tindak Pidana Korupsi. *Al Daulah : Jurnal Hukum Pidana Dan Ketatanegaraan*, 6(1), 121–144. <https://doi.org/10.24252/ad.v6i1.4870>
- [33]. Republik Indonesia. (1847). Kitab Undang-Undang Hukum Perdata.
- [34]. Republik Indonesia. (1981). Undang-Undang Republik Indonesia Nomor 8 Tahun 1981 Tentang Hukum Acara Pidana.
- [35]. Republik Indonesia. (2001). Undang-Undang Republik Indonesia Nomor 20 Tahun 2001 Tentang Perubahan Atas Undang-Undang Nomor 31 Tahun 1999 Tentang Pemberantasan Tindak Pidana Korupsi.
- [36]. Republik Indonesia. (2003). Undang-Undang Republik Indonesia Nomor 17 Tahun 2003 Tentang Keuangan Negara.
- [37]. Republik Indonesia. (2004). Undang-Undang Republik Indonesia Nomor 1 Tahun 2004 Tentang Perbendaharaan Negara.
- [38]. Republik Indonesia. (2017). Peraturan Badan Pengawasan Keuangan Dan Pembangunan Republik Indonesia Nomor 17 Tahun 2017 Tentang Pedoman Pengelolaan Kegiatan Bidang Investigasi.
- [39]. Republik Indonesia. (2018). Peraturan Pemerintah Republik Indonesia Nomor 43 Tahun 2018 Tentang Tata Cara Pelaksanaan Peran Serta Masyarakat Dan Pemberian Penghargaan Dalam Pencegahan Dan Pemberantasan Tindak Pidana Korupsi.
- [40]. Republik Indonesia. (2020). Peraturan Badan Pemeriksa Keuangan Republik Indonesia Nomor 1 Tahun 2020 tentang Pemeriksaan Investigatif, Penghitungan Kerugian Negara/Daerah, dan Pemberian Keterangan Ahli.
- [41]. Rose, H., McKinley, J., & Baffoe-Djan, J. B. (2020). *Data Collection Research Methods in Applied Linguistics*. Great Britain: Bloomsbury Publishing Plc.
- [42]. Rozali, R. D. Y., & Darliana, C. F. (2015). Teknik Audit Investigatif Dalam Pengungkapan Money Laundering Berdasarkan Perspektif Akuntan Forensik. *Jurnal Riset Akuntansi Dan Keuangan*, 3(1), 649–659.
- [43]. Rufus, R. J., Miller, L. S., & Hahn, W. (2015). *Forensic Accounting (Global Edn)*. Pearson Education Limited.
- [44]. Ryketeng, M. (2020). Faktor-Faktor Penyebab Perbedaan Penghitungan Kerugian Keuangan Negara Dalam Tindak Pidana Korupsi (Kasus Korupsi Dana Hibah Persiba Bantul). *YUME : Journal of Management*, Vol 3 No 1.
- [45]. Santoso, S. (2018). *Menguasai SPSS Versi 25*. Jakarta: PT Elex Media Komputindo.
- [46]. Sasangka, H., & Rosita, L. (2003). *Hukum Pembuktian Dalam Perkara Pidana*. Surabaya: Mandar Maju.
- [47]. Silaban, E. H. (2014). Penghitungan Kerugian Keuangan Negara Dalam Tindak Pidana Korupsi (Analisis Putusan Pengadilan Tipikor Pontianak). *Jurnal Nestor Magister Hukum*, Vol 3 No 4.
- [48]. Singleton, T. W., & Singleton, A. J. (2010). *Fraud Auditing and Forensic Accounting (4th ed.)*. John Wiley & Sons, Inc.
- [49]. Sudarmo, Suwardi, & Yulianto, A. (2008). *Fraud Auditing (Edisi 5)*. Bogor: Pusat Pendidikan Dan

- Pelatihan Pengawasan Badan Pengawasan Keuangan Dan Pembangunan.
- [50]. Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Penerbit Alfabeta Bandung.
- [51]. Suhartono, & Jannah, R. (2021). Menelaah Dampak Penerapan Akuntansi Forensik Dalam Mendeteksi Fraud Pengadaan Barang / Jasa Pada Sektor Publik. *Jurnal Akuntansi STIE Muhammadiyah Palopo*, 7(2), 1–15.
- [52]. Sumartono, Urumsah, D., & Hamdani, R. (2020). Skills of the Forensic Accountants in Revealing Fraud in Public Sector: The Case of Indonesia. *Journal of Accounting and Investment*, 21(1). <https://doi.org/10.18196/jai.2101144>
- [53]. Suryani, I. D. R., Kurniawati, E., Wulan, G. A. N., & Cahya, D. H. (2021). Konseptualisasi Peran Teknologi Informasi Dalam Praktik Audit Untuk Membantu Pengungkapan Fraud Di Indonesia. *EL MUHASABA: Jurnal Akuntansi (e-Journal)*, 12(No.2).
- [54]. S.W, D. P., & Kuntadi, C. (2022). Pengaruh Akuntansi Forensik, Audit Investigatif, Dan Independensi Terhadap Pengungkapan Fraud. *Jurnal Economina*, Vol.1(No.3).
- [55]. Transparency International. (2022). Corruption Perception Index. <https://www.transparency.org/en/cpi/2022>. Diakses pada 1 Maret 2023
- [56]. Tuanakotta, T. M. (2014). *Akuntansi Forensik dan Audit Investigatif (Edisi 2)*. Jakarta: Salemba Empat.
- [57]. Tuanakotta, T. M. (2018). *Menghitung Kerugian Keuangan Negara Dalam Tindak Pidana Korupsi (Edisi 2)*. Jakarta: Salemba Empat.
- [58]. Wahyuni-TD, I. S., Haron, H., & Fernando, Y. (2021). The effects of good governance and fraud prevention on performance of the zakat institutions in Indonesia: a Shari'ah forensic accounting perspective. *International Journal of Islamic and Middle Eastern Finance and Management*, Vol.14(No.4), 692–712. <https://doi.org/10.1108/IMEFM-03-2019-0089>
- [59]. Wiharti, R. R., & Novita, N. (2020). Dampak Penerapan Akuntansi Forensik dan Audit Investigasi dalam Mendeteksi Fraud Pengadaan Barang/Jasa. *Jurnal Ilmiah Akuntansi Dan Humanika*, Vol.10(No. 2).
- [60]. Wuysang, R. V. O., Nangoi, G., & Pontoh, W. (2016). Analisis Penerapan Akuntansi Forensik Dan Audit Investigatif Terhadap Pencegahan Dan Pengungkapan Fraud Dalam Pengelolaan Keuangan Daerah Pada Perwakilan BPKP Provinsi Sulawesi Utara. *Jurnal Riset Akuntansi Dan Auditing "Goodwill,"* Vol.7(No.2), 31–53.
- [61]. Yusuf, A. M. (2014). *Metode Penelitian Kuantitatif, Kualitatif, dan Penelitian Gabungan*. Jakarta: Kencana.

Amelia Kristina Nasution¹,

¹Alumni of the Master of Accounting Science at the University of Jambi in 2023,