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Research Article

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Analysis of Application of Forensic Accounting and Investigative Audit on the Prevention and Disclosure of Fraud in Management Regional Finance of BPKP Representative of West Sumatra Province

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Abstract: The purpose of this study is to explore and analyze: (1) the application of forensic accounting can be applied and function effectively in fraud prevention (preventive); (2) the application of valid and effective forensic accounting for fraud detection (detectives); and (3) the implementation of valid and effective investigative audits for the functioning of fraud investigations (repressive) in the management of regional finances. The analytical method used is a qualitative descriptive method that examines the participant's perspective and some information from key informants through in-depth interviews and additional question instruments using purposive sampling, then triangulates the data obtained by sources and collection techniques for interactive analysis by reducing, presenting in the form of narrative text, tables, matrices, charts, then conclusions are drawn. The results of the research and analysis state that forensic accounting can be applied and functions effectively to be applied in preventing fraud (preventive) in regional financial management through FCP, SPIP and SIMDA; forensic accounting also applies and functions effectively to be applied to fraud detection (detectives) in regional financial management through Operational Audits, Government Goods and Services Procurement Audits (Probity Audit), EDP Audits: Computer Forensics, and Whistleblower System; and the Investigative Audit Function is very applicable and effectively applied to fraud (repressive) investigations in regional financial management through investigative audits, in order to calculate losses on state financial audits, and provide expert witnesses.

Keywords: Forensic Accounting, fraud detection, Computer Forensics.

INTRODUCTION

Fraud practices in general and corruption in particular are still phenomenal issues that are always interesting to discuss. Based on empirical data over the last few years, the Regional Government and the regional financial sector have become the institutions that have the most dominant level of fraud (corruption). Through the role and performance of BPKP as an institution that has the authority to carry out financial supervision for the central government and local governments, it is expected to be able to suppress/minimize various acts of fraud by preventing, early detection, and taking action against fraudulent practices that occur. Recently, the development of forensic accounting and investigative auditing has become hope for law enforcement officers, both the Police and the Attorney General's Office as well as BPKP as APIP in efforts to prevent and disclose fraud (corruption) practices. Therefore, there is a need for studies that explore the application of forensic accounting and investigative auditing in the application and the effectiveness of their functions in preventing and disclosing fraud.

LITERATURE REVIEW

Theoretical Foundation

Strain Theory (Means – Ends Schema)

Robert K. Merton, (1957) put forward his theory that corruption is a human being caused by social pressure, thus causing a violation of norms. Every social system has a goal and people try to achieve

it through agreed-upon means. tall. A community life that is concerned with its own family members (nepotism) as well as interests between individuals and groups (collusion), will cause other people to be jealous and foster corruption. Likewise, people will look for ways to achieve power so that they get the opportunity to get what they want. This may explain why many developing countries fall into the plague of corruption.

The Triangle of Fraud

Donald R. Cressey, (1953), revealed the concept of fraud known as the fraud triangle. Cressey stated that the reason someone commits fraud is because there are:

Pressure, to make mistakes more depending on the individual situation, such as facing financial problems, one's bad habits such as gambling and drinking; being greedy or having unrealistic expectations/goals.

Opportunity (opportunity), according to research conducted by the IIA Research Foundation in 1984, in the order of the most frequent occurrences are: overly trusting of subordinates; weak management authorization and approval procedures; explanation in personal financial information (banking fraud); there is no separation between authorized grants and asset custody; no independent checks on performance; lack of attention to the problem in detail (detail); there is no separation between asset holders and record-

keeping functions; no segregation of accounting duties; lack of authorization; departments/sections that are rarely inspected; a statement of no interest is not required; and inadequate documents and records.

Justification (rationalization), occurs in the case of a person or group of people who build justification for the mistakes made. Fraudsters usually look for excuses that what went wrong is not justification or deception.

GONE Theory

The theory that also discusses fraud behavior is well put forward by Jack Bologne, (1993).

This theory is known as the GONE theory. Bologna in Soepardi, (2006) explains the factors that encourage fraud, including:

Greed (greed), related to the existence of greedy behavior that potentially exists ineveryone.

Opportunity, relating to the state of the organization or community agency in such a way that there is an opportunity for someone to commit fraud against it.

Needs (needs), related to the factors needed by individuals to support their lives which he thinks are reasonable.

Exposure (disclosure), relating to the actions or consequences that will be faced by the fraud perpetrator if the perpetrator is found to have committed fraud.

Fraud

In everyday terms, fraud is often given different names, such as theft, theft, extortion, extortion, embezzlement, forgery, and others. In accordance with the Statement of Auditing Standards (PSA) No. 70, Fraud is translated as fraud, while errors and irregularities are respectively translated as errors and irregularities according to the previous PSA, namely PSA No.32. Fraud can be classified into three types according to the Association of Certified Fraud Examinations (ACFE), namely:

Financial Statement Fraud

Fraud committed by management is in the form of material misstatements of financial statements that are detrimental to investors and creditors of a financial or non-financial nature.

Misappropriation of assets (Asset Misappropriation) Misappropriation of assets can be classified into 'cash fraud' and fraud on inventories and other assets, as well as fraudulent disbursement.

Corruption (Corruption)

Corruption occurs if it meets three criteria which are conditions that a person can be charged with corruption laws, namely: 1) against the law, 2) enriching oneself or other people or corporations, 3)harming state finances or the state economy.

Forensic Accounting

Tuanakotta, (2012) argues that forensic accounting is the application of accounting discipline in a broad sense, including auditing, to legal issues for legal settlement inside or outside the court. Forensic accounting can be applied in the public and private sectors, so that if you include different parties, then forensic accounting according to Crumbley in Tuanakotta, (2012) suggests that simply forensic accounting can be said to be accurate accounting for legal purposes, which has stood the test in the arena of feuds over the years. litigation, in the process of judicial review or administrative review.

Bologna and Lindquisdt, (1995) define forensic and investigative accounting as the application of financial skills and an investigative mentality to unsolved issues, carried out in the context of the rules of evidence. De Lorenzo, (1993) defines forensic accounting as the application of accounting knowledge and skills to legal issues, although in today's complex commercial environment the meaning and use of this term is much broader.

Tuanakotta, (2012) argues that in the public sector (government), the stages in the entire series of forensic accounting are divided among various institutions. There are institutions that carry out state financial audits (BPK), there are institutions that are part of the government's internal supervision (BPKP), there are court institutions, there are institutions that support crime-fighting activities in general, and corruption in particular (PPATK), and other institutions such as the KPK. There are also non-governmental organizations that function as pressure groups such as ICW, PekatUGM, and so on.

In both the public and private sectors, forensic accounting deals with losses. In the public sector there are state losses and state financial losses while in the private sector there are also losses arising from breach of contract in an engagement. Losses are the first point in the Forensic Accounting Triangle. The basis is Article 1365 of the Civil Code which reads: "every act that violates the law and causes harm to others, obliges

the person who caused the loss because of his mistake to replace the loss". The second point in the Forensic Accounting Triangle is illegality.

Without an unlawful act, no one can be sued for compensation and the third point in the Forensic Accounting Triangle is that there is a link between the loss and the unlawful act or there is a causal relationship between the loss and the unlawful act. Acts against the law and causality are the domain of legal experts and practitioners, while the calculation of the amount of loss is the domain of forensic accountants.

In figure 1 the Forensic Accounting Triangle model is presented.

Perbuatan Melawan

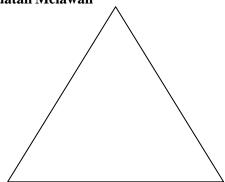


Figure 1: Kerugian Hubungan **Sumber:** Tuanakotta, (2012)

Figure 1: Segitiga akuntansi forensik forensic accounting for fraud prevention (preventive) according to miqdad (2008), steps to prevent fraud includes:

Build a Good Internal Control Structure

In strengthening internal control in the company, COSO (The Committee of Sponsoring Organizations of The Treadway Commission) introduced a control framework that is broader than the traditional accounting control model and includes risk management, namely internal control consists of 5 (five) interrelated components. related, namely:

Control Environment

Risk Assessment

Control Activities

Information and Communication (Information and Communication)

Monitoring (Monitoring)\

Streamline Control Activities

Streamlining control activities by means of performance reviews, information processing, physicalcontrol, and segregation of duties.

Improve Organizational Culture

Through the implementation of the principles of Good Corporate Governance include:

Justice (Fairness)

Transparency

Accountability

Responsibility (Responsibility)

Morality

Reliability (Reliability)

Commitment

Streamline the Internal Audit Function

Some things that must be considered by management so that the internal audit function can effectively assist management in carrying out its responsibilities by providing analysis, assessment, suggestions and comments regarding the activities it examines are:

- ➤ The internal audit department must have an independent position in the company organization.
- ➤ The internal audit department must have a written job description, so that each auditor clearly knows what their duties, authorities and responsibilities are.
- > Internal audit must have an internal audit
- ➤ There should be strong support from top management to the internal audit department.
- The internal audit department must have professional, capable resources, can be objective and have high integrity and loyalty.

According to the BPKP Education and Training Center, (2008) fraud prevention is an integrated effort that can suppress the occurrence of factors causing fraud (fraud triangle), namely:

- Minimize the opportunity for fraud to occur,
- Reducing pressure on employees to be able to meet their needs,
- Eliminating reasons to justify/rationalize the fraud committed.

Forensic Accounting for Fraud Detection (Detectives)

The following is an outline of fraud detection based on the classification of fraud by ACFE in Miqdad (2008), namely:

Financial Statement Fraud

Fraud in the presentation of financial statements can generally be detected through financial statement analysis as follows:

Vertical analysis

Horizontal analysis

Ratio analysis

Misappropriation of Assets (Asset Misappropriation)

The techniques for detecting frauds in this category vary widely. However, proper understanding of good internal control in these items will be very helpful in carrying out fraud detection. Each type of fraud can be detected through several different techniques.

Analytical review
Statistical sampling
Vendors or outsider complaints
Site visit – observation3

Corruption

Most of these frauds can be detected through complaints from honest coworkers, reports from colleagues, or suppliers who are dissatisfied with submitting complaints to the company. Detection of this fraud can be seen from the characteristics (red flags) of the recipient and the giver.

Fraud can be detected as early as possible if the management or internal auditors are observant to see the signs of the fraud. Tunggal, (2011) stated that some of the signs of fraud are:

- There is a significant difference in financial statement figures with the previous year.
- ➤ There is no clear division of tasks and responsibilities.
- > Someone handles almost all the important transactions.
- > Transactions that are not supported by sufficient evidence.
- > Difficult company development.

Investigative Audit

Jack Bologna and Paul Shaw cited in Tunggal, (2012) say fraud or investigative auditing is a skill that goes beyond the realm of embezzlement and fraud in corporate management, or commercial bribery. Indeed, forensic accounting skills extend beyond the general area of collar crime.

According to the BPKP Education and Training

Center, (2008), investigative audit is a systematic and measurable activity to uncover fraud since it is known, or an event/event/transaction is indicated that can provide sufficient confidence, and can be used as evidence that fulfills the proof of a truth in explaining events that have occurred. previously assumed in order to achieve justice. The implementation of an investigative audit is intended to determine the truth of the problem through the process of testing, collecting and evaluating evidence relevant to fraud and toreveal the facts of fraud, including:

There is an act of fraud (subject)
Identifying the fraud perpetrator (object)
Explain the modus operandi of fraud (modus)
Quantify the value of the loss and the impact it causes

Investigative Audit of Fraud Handling (Repressive)

An investigative audit is carried out as a repressive measure to deal with fraud that occurs.

A repressive strategy must be implemented, especially by being directed to provide appropriate legal sanctions quickly and precisely to parties involved in fraudulent practices. Thus, the process of handling fraud from the stage of investigation, investigation and prosecution to the judiciary needs to be studied to be perfected in all its aspects so that the handling process can be carried out quickly and precisely (Tuanakotta, 2012).

The investigative audit techniques used in handling fraud are generally common ways in auditing, such as physical examination, confirmation, checking documents, analytical review, asking for an oral or written explanation from the auditee, recalculation, and observing. Only in aninvestigative audit, the audit techniques are exploratory, looking for "fields" or probing or deepening. In investigative audits, audit techniques are more emphasized on analytical reviews (Swarna, 2012).

Relationship between Forensic Accounting, Investigative Audit and Fraud

Table 1 shows the relationship between forensic accounting and fraud audit (auditinvestigative).

	Akuntansi Forensik					
Jenis	Fraud Audit					
Penugasan	Proaktif		Audit Investigatif			
Sumber	Risk Assessment	Temuan Aud	dit, Tuduhan,	Temuan Audit	K	Н
Informasi		Keluhan, Tip			U	U
Output	Identifikasi potensi fraud	Indikasi awal a	danya <i>fraud</i>	Bukti ada/tidaknya pelanggaran	N T A N S I	K U M

Table 1: Forensic Accounting and Investigative Audit

Source: Tunakotta, (2012)

Table 1 above shows the investigative, accounting and legal audit processes. The investigative audit begins in the second part of the reactive fraud audit, which is after the initial indication of fraud is found. The investigative audit is part and the starting point of forensic accounting. Table 1 above can be developed further by incorporating elements of a criminal act, for example a criminal act of corruption (tipikor). By including the corruption element, the accounting element is the calculation of state financial losses and the corruption court process (or event) starting from the investigation, investigation, prosecution, examination at trial, court decisions and legal remedies (Tuanakotta, 2012).

Regional Financial Management

Permendagri Number 21 of 2011 concerning the Second Amendment to Permendagri Number 13 of 2006 concerning Guidelines for Regional Financial Management which, among other things, explains: Regional Financial Management is the overall activity that includes planning, implementation, administration, reporting, accountability and supervision of regional finances.

Based on Law No.33 of 2004 article 66 paragraph 1, concerning the general principles of regional financial management, it explains that regional finances must be managed in an orderly manner, complying with laws and regulations, economically efficient, effective, transparent and responsible with due observance of the principles of justice, compliance and benefits to society.

Regional financial management is carried out in an integrated system that is realized in the regional revenue and expenditure budget (APBD).

METHODS

This study is viewed from the analysis method and its design is a type of qualitative research, and when viewed from the level of explanation is a type of descriptive research.

Descriptive qualitative methods are considered appropriate, because research must be carried out in a thorough, in-depth and thorough manner to obtain an overview of generally accepted principles orpatterns with respect to the symptoms that exist in the object of research. This type of descriptive qualitative research was also chosen so that the results obtained from this research can be a good, clear, and balanced recommendation for decision makers in organizations related to the research topic.

Qualitative participant research examines perspectives with interactive and flexible strategies. Qualitative research is aimed at understanding social phenomena from participant's point of view. Thus the meaning or understanding of qualitative research is research that is used to examine the condition of natural objects where the researcher is the key instrument (Sugiyono, 2005). In this qualitative research, the determination of data (informants/informants/participants) is carried out purposively, that is, selected with certain considerations and objectives. The results of qualitative research methods only apply to the case of the social situation, which can be transferred or applied to social situations (other places), if the social situation has similarities or similarities to the social situation under study (Sugiyono, 2014).

ANALYSIS RESULTS AND DISCUSSION

Research Results

Potential and Trends of Fraud in Regional Financial Management in West Sumatra

2015

Temuan Tahun Pengawasan Jumlah Kasus Nilai Kerugian Negara (Kejadian) (**Rp.**) 217 2.242.898.390 2011 716.081.826 2012 158 2013 80 2.803.629.255 123 2014 6.273.867.322

181

Table 2 Recapitulation of Findings after Follow-up of BPKP Representatives of West SumatraProvince in 2011-2015

Sumber: Perwakilan BPKP Provinsi Sulawesi Utara, LHP 2012-2015 – data olahan.

2.595.301.306

Table 3: Results of Investigative Audits and Audits of Calculation of State Financial Losses in the Province of West Sumatra in 2012 – 2015

		Jumlah Kasus (Laporan)								
No.	No. Instansi		2012		2013		2014		2015	
		AI	PKKN	ΑI	PKKN	AI	PKKN	AI	PKKN	
1	Satuan Kerja K/L	-	-	-	-	-	-	-	-	
2	Pemprov	-	1	2	-	-	1	-	-	
3	Pemkab	1	7	2	8	3	11	2	9	
4	Pemkot	-	3	1	6	-	2	1	2	
5	BUMN	-	-	-	-	-	-	-	-	
6	BUMD	1	1	-	-	-	-	-	-	
Jumlah		1	12	5	14	3	17	3	11	

Sumber: Perwakilan BPKP Provinsi Sulawesi Utara, LHP 2012-2015 – data olahan

Fraud Prevention System as Application of Forensic Accounting Application Government Internal Control System (SPIP)

The implementation and implementation of SPIP in the Regional Government as a form of fraud prevention efforts in the form of the following activities.

Preparation of the SPIP Guidance/Operation Guidelines, until the end of 2014 the SPIP Guidance and Implementation Task Force (Satgas PP) had issued 15 General Guidelines stipulated by the Regulation of the Head of BPKP related to the SPIP implementation/administration and as many as 26 Technical Guidelines;

SPIP socialization has been carried out by the PP SPIP Task Force as many as 392 Regional Governments until the end of 2014;

Guidance and Consultation through 3 activities, namely:

Mapping / Diagnostic Assessment, from 2010 to 2012 has been carried out to 238 localgovernments out of 524 existing local governments or 45.23%.

Regulations for the Implementation of SPIP, until the end of 2012 technical guidance has been carried out in the form of issuance of Regional Head Regulations (Perkada) related to the Implementation of SPIP for Government Agencies as many as 524 Perkada consisting of 33 Provincial Perkada, 398 Regency Perkada, and 93 City Perkada.

Preparation of SPIP Implementation Design Documents.

Improvement of APIP Auditor Competence

SPIP Education and Training (Diklat) has been promoted by the PP SPIP Task Force since 2010-2014 in the form of SPIP training and workshops carried out through the BPKP Education and Training Center as well as each representative in the region.

Fraud Control Plan (FCP)

BPKP in particular is and continues to develop controls specifically designed to prevent, counteract, and facilitate disclosure of incidents that indicate corruption. The system is characterized by the existence of specific attributes which are a deepening or strengthening of the existing governance system of each organization which is influenced by the situation and conditions of each organization. This control system is then termed the Fraud Control Plan (FCP).

In its application, the FCP consists of 10 specific attributes that must be built in every government

organization which will later become parameters to be evaluated. These attributes consist of: Integrated Policy, Responsibility Structure, Fraud Risk Assessment, Employee Concern, Community Customer Care, Whistleblower Protection, Fraud Reporting System, External Reporting, Investigation Standards, and Standards of Conduct and Discipline.

The stages (cycles) in the implementation of the FCP consist of the socialization stage, agency commitment, evaluation of the Anti-Corruption Program (PAK), presentation of evaluation results, reporting, and follow-up and monitoring which

will later become feedback in the PAK evaluation. The implementation of the FCP is more focused on the results of the evaluation as the main approach which consists of the main tools of the evaluation program, supporting tools for extracting perceptions and supporting tools for Fraud Risk Assessment.

Regional Management Information System (SIMDA)

As of January 2016, the SIMDA Application Program has been implemented in 425 local governments out of 542 local governments or 78.41%, with details presented in Table 4.

Table 4: SIMDA Users in Local Government

No.	Jenis Implementasi	Januari 2016		
1	Pengguna SIMDA	425 Pemda		
2	SIMDA Keuangan	365 Pemda		
3	SIMDA BMD	347 Pemda		
4	SIMDA Gaji	69 Pemda		
5	SIMDA Pendapatan	55 Pemda		

Sumber: BPKP, 2016.

The Advantages and Benefits of Using SIMDA Include:

SIMDA is designed based on a regional financial management information system in accordance with applicable laws and regulations;

SIMDA application can be implemented for integrated regional financial management, using multi-user technology and client/server technology from budget preparation, budget execution, and financial accountability, so that it has the advantages of guaranteed transaction control, efficient administration, fast and accurate in managing transactions. Generate financial information;

Can provide knowledge transfer in order to improve the competence and capacity of local government human resources in the form of mastery of accounting and auditing disciplines, mastery of regional financial management business processes, and practical experience of regional financial management;

Continuous maintenance in the context of developing and improving SIMDA Applications; and

Easy to use because it has features that are simple, easy to understand and learn.

Fraud Detection Method as Forensic Accounting Application

Operational Audit (Operational Audit)

Operational audit is a systematic examination of activities, organizational programs and all or partof activities with the aim of assessing and reporting whether resources and funds are used economically and efficiently and whether the planned objectives of programs, activities, activities can be achieved (effectively) by does not contravene the applicable rules, regulations and laws.

Operational audit is an evaluation of the organization's operational activities designed to assess the level of effectiveness, efficiency, and economy in the implementation of activities/programs.

The operational audit implementation procedure includes several stages, as follows:

Audit Preparation

Audit preparation aims to collect information, review regulations, provisions and laws relating to the activities being audited and analyze the information obtained in order to identify potential weaknesses.

How to obtain information in the preparation stage of this audit can be done with several approaches that can also detect fraud:

Conversation with the head of the object of examination

> Interview with other parties

- > Physical examination
- > Reviewing previous audit reports
- > Transaction testing
- > Review management reports
- > Data flow diagrams and system flow cards
- Flow chart

Management Control Test

Management control testing is carried out to determine the level of risk of resource abuse and conduct an assessment of the management control assessment. To determine the level of risk, the auditor team must first consider several things, including:

Pay attention to any red lights seen in the information regarding the government agency beingaudited.

Attention to support from management whether management believes in the importance of management controls and has made a commitment to implement them.

Taking into account the level of adequacy of the leaders and employees of the agency beingaudited.

After considering the above elements, the team then assesses whether the overall risk level is high, medium or low. After assessing the level of risk, the audit team assesses the effectiveness of the audit object's control system and then checks the management control whether the management control is logical, complete enough and may detect fraud that may occur.

Advanced Check

This follow-up examination aims to obtain sufficient evidence to support the definitive audit objectives that have been obtained at the stage of testing and reviewing the management control system.

Audit Result Report

On the basis of the Audit Working Paper, the chairman together with the team prepares the Audit Result Report. The Audit Result Report consists of Audit Working Papers and recommendations for improvement of control weaknesses from the Government Agencies being audited.

Probity Audit (Goods/Services Procurement Audit)

Many corruption cases involving at least regional heads are cases related to the procurement of goods/services and cases of fraud occur at the planning stage. Therefore, it is deemed necessary to carry out audit procedures starting from the identification of needs in the preparation of the General Procurement Plan (RUP) which is part of the preparation of the RKA SKPD. The data states that:

85% of corruption cases involving at least 306 Governors/Regents/Mayors are cases of Procurement of Goods/Services (PBJ).

KPK research stated that >70% of corruption cases came from PBJ.

3,423 corruption cases handled by BPKP since 2003 are PBJ cases.

The basis for the issuance of probity audit guidelines is to encourage the role and function of APIP in preventing, deter and detect as an Early Warning System for the process of procurement of goods and services as well as in the context of quality of state improving the financial accountability through effective, efficient, transparent, and accountable management of state finances.

The impacts resulting from the process of procuring goods/services that meet the probity principlesare:

Avoid conflicts and problems.

Avoid corrupt practices.

Improve the integrity of the public sector through behavior change and organizational change.

Give confidence to the public that the implementation of public sector activities has been carried out through a process that has integrity and can be trusted.

Provide objective and independent assurance on the probity of the procurement process for goods/services.

Minimize the potential for litigation (legal issues).

Representatives of BPKP North Sulawesi Province have carried out supervisory activities in the form of assurance and consulting with the aim of providing input so that the process of procurement of goods/services is carried out efficiently in accordance with applicable regulations and assets recorded reflect actual conditions.

EDP Audit: Computer Forensic

BPKP needs and must be able to have auditors with the ability to evaluate the reliability of information technology systems implemented by institutions or business entities to produce performance reports or financial reports of these

agencies/business entities. Thus, the EDP Auditor Taskforce was formed, which is currently under the auspices of the Deputy for State Accountants at the Central BPKP.

Electronic Data Processing (EDP) Audit is an audit service provided by BPKP which includes auditor review services on risks directly related to Information Technology (IT) that threatens Central/Regional Government Institutions (Departments/Ministries or Service) and Agencies State/Regional Owned Enterprises. One of the assurance services of EDP Audit is Computer Information Mining which is the application of Computer Forensic (computer forensics). This service is intended to help provide management and other stakeholders with rapid access to important computer information that may not be available in current reporting systems. This activity is often carried out to analyze, direct and resolve an unusual and unexpected business event, such as fraud or fraud.

The application of computer forensics can be directly practiced in daily audit assignments, for example in audits of procurement of goods and services that have used eTendering. An auditor is required to be able to adapt to the auditee regarding his knowledge in computer forensics. The enormous benefit of computer forensics in detecting and disclosing a fraud (deviations and violations that can result in state losses) is deemed necessary to be used as a tool in conducting examinations, especially in investigative audits.

To be able to detect the occurrence of fraud using computer forensics expertise, the auditor must be sensitive to clues or traces that indicate fraud that can become forensic objects, including:

Log files or records of computer usage activities that are stored neatly and in detail in the system;

Files that at first glance have been deleted systemically, but technically can still be retrieved incertain ways;

Digital records owned by traffic control devices such as IPS (Intrusion Prevention System) and IDS (Intrusion Detection System);

Hard disk containing backup data/information from the main system;

Records of e-mails, mailing lists, blogs, chats, and other modes of interaction and communication;

Various types of files created by the system and applications to help perform file management;

Records of interactions and traffic via the internet from one place to another (based on IP address for example); The absence of access to a server or computer managed by the system to record every user who logs into the related device; and so forth.

Complaint Service (Whistleblower System)

The Whistleblower System (WBS) is a violation reporting system that allows the active role of employees and external parties of the organization (general public) to submit complaints regarding violations and alleged violations committed by both internal BPKP and external organizations in the administration of government, especially in the management of state finances.

The BPKP Whistleblower System can be an entry point for conducting a special examination (investigation) on the alleged occurrence of a fraud in financial management in the public sector.

BPKP Provide space for reporters to report and/or disclose facts of violations and indications of fraud that can cause state financial losses, including violations of rules and regulations in the context of law enforcement and improvement of the government management system.

Assignment of Investigative Audit in Fraud Handling

Investigative Audit

Repressive supervision can be carried out through investigative audits as a follow-up to weaknesses found in the design and implementation of fraud control plans as well as complaints received, which include the review of financial documents for special purposes, which can be used for litigation in court trials and settlement of state financial losses, as well as such as cases of corruption.

Investigative audits play a very important role in disclosing criminal acts of corruption (fraud), which are carried out by:

Uncover cases and modus operandi,

Determine the causes of deviations and recommendations,

Identify the parties suspected of being related/responsible, 4) calculate the amount of state financial losses.

Internally, BPKP conducts investigative audit assignments based on the regulation of the Head of BPKP Number: PER-1314/K/D6/2012 concerning Guidelines for Assignment to the Investigation Sector. Requests for assignments in the field of investigation come from:

Development of Operational Audit Results Community Complaints Request by Investigating Agency/Court Decision Assignment Object Request

In the examination carried out by the BPKP Representative of North Sulawesi Province in this case in the field of Investigation based on the request of Law Enforcement Officials (APH) on 16 Regional Governments in the Province of West Sumatra in 2015, an investigative audit has been carried out as many as 3 reports/cases with a total indication of state financial losses amounting to Rp. 5,567,375,159.40.

Audit for Calculation of State Financial Losses

An audit in the context of Calculating State Financial Losses (PKKN) is an audit with a specific purpose intended to express an opinion regarding the value of state financial losses arising from a fraud case and used to support litigation actions.

In 2015, the West Sumatra Province BPKP Representative conducted a PKKN audit to express anopinion on the value of state losses arising from irregularities in order to support litigation at the request of APH as many as 11 reports with a total state loss of Rp. 8,726,914,493.24.

Provision of Expert Information

Provision of expert information is the provision of opinions based on the professional expertise of the BPKP auditor (in the accounting and auditing fields) in a corruption and/or civil criminal case to make a case clear for investigators and/or judges. The assignment of providing expert testimony includes the implementation of providing expert testimony to investigators, public prosecutors, and before a judge in a court session which is carried out based on the request of the investigator, the request of the public prosecutor, or the judge's determination, and is a continuation of the investigative audit. In 2015, BPKP Representatives for West Sumatra Province gave 8 cases of Expert Statements to prosecutors' investigators and 9 cases to Police investigators. In addition to investigators, the BPKP Representative for West Sumatra Province has also provided expert testimony at the Corruption Court in 2015 in 13

ANALYSIS AND DISCUSSION

Analysis of Forensic Accounting Application for Fraud Prevention in Regional Financial Management

Several interviews and data and information obtained, there are several important reasons why fraud prevention strategies should be prioritized compared to fraud detection and action steps, which are as follows:

If it has occurred, fraud has resulted in substantial financial losses;

The result of recovery of corrupted state money (fraud) is very small;

Cases of corruption (fraud), damaging the reputation of both institutions and individuals;

The litigation process takes considerable time and money for both law enforcement officers and potential suspects;

The longer the incident of corruption (fraud) is not revealed, the more opportunities for the perpetrators of corruption (fraud) to cover up their actions with other frauds.

Based on the research results that have been described previously, it is stated that BPKP's efforts to prevent (preventive) the occurrence of fraud in regional financial management are through the implementation of:

- ➤ Government Internal Control System (SPIP)
- Fraud Control Plan (FCP), and
- Regional Management Information System (SIMDA)

From the results of this study, it can be analyzed that the application of forensic accounting in regional financial management is very relevant, especially in efforts to prevent fraud through the tools or applicative systems that have been built, namely: Fraud Control Plan (FCP) which is a special control for fraud prevention, SPIP as general control in every stage of regional financial management starting from planning, budgeting, implementation, reporting and accountability to monitoring and evaluation, as well as SIMDA specifically as an information system that will produce outputs from controlled regional financial management results. In other words, every existing tool, including FCP, SPIP and SIMDA, is an applicable system applied to fraud prevention in regional financial management.

Seeing their usefulness and benefits, FCP, SPIP and SIMDA are tools that function effectively in preventing and preventing fraud in local financial management, because basically every system built is not only a reliable hard control (system, method and infrastructure) to minimize there is an opportunity (opportunity) for fraud perpetrators to take action, but actually it also contains soft control elements such as commitment and integrity

in the control environment sub-elements in SPIP, as well as those in the FCP attributes. So that the factors of pressure and rationalization from the perpetrators of fraud should be reduced from time to time because these systems function effectively to prevent (preventive) fraud.

The results of further analysis found that the implementation of SIMDA even though it had been optimally applied but not enough, because it was found that fraud actually occurred before financial transaction data and information were entered into SIMDA, in other words the point was in making evidence of transactions which were often made fictitious or other forms of fraud before being accounted for and inputted into SIMDA. So in an effort to prevent fraud, it is more expected that FCP and SPIP are optimal.

The implementation of SPIP has been carried out quite optimally based on the results of the evaluation of SPIP implementation that has been carried out by BPKP, through making instruments in the form of technical guidelines, conducting socialization, guidance and consultation (diagnostic assessment), training/workshops, establishment of regional head regulations and the task force.

SPIP task force in the regions, but these efforts have not been carried out evenly in each region, consistently, and accompanied by a strategy to encourage the role of APIP in the regions (Provincial/Regency/City Inspectorate) as BPKP partners in carrying out the same functions as existing at BPKP, this can be seen from the condition of the quality and capacity of APIP in the West Sumatra Regional Government, which is on average at level 1 (initial) until 2015 (there are only 3 local governments: West Sumatra Province, Padang City and Solok City that have increased to level 2) while the APIP level at the North Sulawesi BPKP Representative was already at level 3 which in addition to providing assurance e can also function as a consultant.

The factors that cause the existing control systems to be not optimal, specifically the FCP, so thatthey cannot function effectively at the level of reality, are only effective at the level of concept.

Another thing that can be the main measure of the non-optimal implementation of the FCP is that there is not a single local government in North Sulawesi, which has compiled the attributes/components of the FCP. Another factor that can be considered is the role of APIP in

regions that are less active in preventing fraud, lack of commitment and response, starting from regional leaders, SKPD leaders, to the level of the implementing apparatus.

Analysis of Forensic Accounting Applications for Fraud Detection (Detectives) in Regional Financial Management

In the results of the research above based on the data and observations made, the detection of fraud in regional financial management has been described as a form of application of forensic accounting, applied through:

- > Operational Audit (Operational Audit),
- Goods/Services Procurement Audit (Probity Audit),
- ➤ Electronic Data Processing (EDP) Audit: Computer Forensic, and
- Whistleblower System (complaint service).

The application of forensic accounting for fraud detection in regional financial management through operational audits, probability audits, computer forensics (EDP audits), and Whistleblower systems (WBS) is an applicable method, often becoming the tools that BPKP relies on in detecting and uncovering fraud.

Through operational audits, BPKP often detects fraud or irregularities that are found in the examination (review) carried out so that the Operational Audit functions effectively detecting the existence of a fraud, even its development can be continued with investigative audits to uncover cases of corruption, and other unlawful acts that result in state financial loss. Likewise with the Probity Audit which specifically functions effectively to detect fraud in the procurement process forgoods/services, which is a sector that is vulnerable to corruption. Then also **EDP** (Computer Forensic) Audit Whistleblower System as a form of new breakthrough by utilizing the sophistication of information technology that functions effectively detect fraud through computer-assisted techniques and digital tools as well as a complaint system in the form of an online complaint service.

However, in evaluating its application, both Computer Forensic and Whistleblower Systems are still at the development stage because they are still relatively new. At the BPKP Representative forNorth Sulawesi Province itself, it is in an effort to equip its auditors in mastering science and techniques in computer forensics through computer forensics training/training, while for the

Whistleblower System, BPKP only uses it internally, for reporting from external parties, BPKP is only limited to integrating it with the LAPOR complaint system! (People's Online Aspirations and Complaints Service) initiated and developed by the PresidentialStaff Office.

In this case, Computer Forensic and Whistleblower System are still not optimally implemented. Meanwhile, the Operational Audit is considered optimal in its implementation because it is a regular task and function carried out by APIP both Representatives **BPKP** and Provincial/Regency/City Inspectorates in conducting reviews so far, and often many findings/fraud cases are detected and revealed. As for the implementation of the Probity Audit, it is considered quite optimal, because in implementation it is still not comprehensive and consistently carried out in the process of procuring government goods/services.

Analysis of the Application of Investigative Auditing for Fraud Disclosure (Repressive) in Regional Financial Management

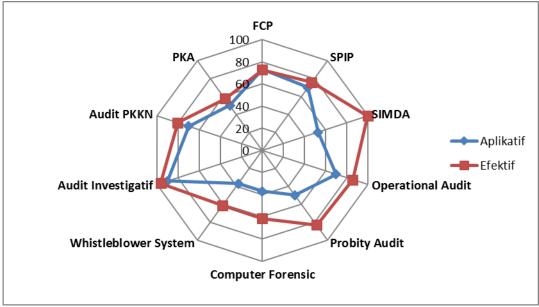
The assignment of the Investigation Division of the West Sumatra Province BPKP Representative to the Regional Government in West Sumatra has only been carried out at the request of the Investigating Agency (law enforcement officials) both investigative audit assignments, audits in the context of calculating state financial losses, as well as providing expert information. In other words, the assignment of the Investigation field to the West Sumatra Province BPKP Representative has not been carried out thoroughly and independently based on the authority in accordance with the provisions of the legislation.

The results of the analysis show that the

application of investigative audits to the handling (repressive) of fraud in regional financial management through the assignment of Investigative Audits, audits in the context of Calculating State Financial Losses, and Providing Expert Information is an applicable method of investigative audit based on theory and practice in accordance with laws and regulations. existing ones, function effectively in accordance with their targets for repressive efforts on revealed fraud, as well as being preventive in the context of providing a deterrent effect to fraud perpetrators.

In its implementation and implementation, the assignment of Investigative audits, audits in the context of Calculation of State Financial Losses, and Provision of Expert Information can be said to be optimal based on performance targets and achievements from the field of Investigation, with reports on the results of investigative audits, audit results in the context of Calculation of Financial Losses the State, and the Provision of Expert Information as an evaluation tool for the number of fraud cases that were revealed, both found and based on requests from Law Enforcement Officials. However, it still needs to be addressed and developed both internally and externally as described above. In summary, the results of the analysis of the implementation of the Investigative Audit on efforts to handle fraud in Regional Financial Management.

The results of the analysis of the application of Forensic Accounting and Investigative Auditing that are applicable and function effectively towards prevention (preventive), detection (detective), and handling (repressive) fraud in regional financial management are outlined in the form of a chart as shown in figure 2.



Source: primary data – processed results.

Figure 2: Cobweb Chart of Application Applications and Effectiveness of AFAI as Preventive, Detective & Repressive Tools Against Fraud Prevention & Disclosure in Regional Financial Management in West Sumatra.

CONCLUSION

Based on the results of the research and analysis of the discussion in the previous chapter, conclusions can be drawn from this research, as follows.

Application of forensic accounting for fraud prevention (preventive) in regional financial management in West Sumatra by the BPKP Representative of West Sumatra Province by using thefollowing prevention tools (systems):

- Fraud Control Plan (FCP)
- ➤ Government Internal Control System (SPIP)
- Regional Management Information System (SIMDA)

These control systems in application are fraud prevention systems and function effectively as preventive tools against fraud in regional financial management. In its implementation, the FCP is still not optimal because it has not been 'grounded', it is also influenced by the lack of response and commitment from the Regional Government. SPIP in its implementation is quite optimal, the efforts that have been made such as socialization, guidance and consultation, training and guidelines that have been formed and described in the Regional Government in the format of Regional Head Regulations and the formation of the SPIP Task Force. Meanwhile, SIMDA has been implemented optimally and all local governments in West Sumatra in particular have used this application with various advantages.

Application of forensic accounting for fraud detection (detective) in regional financial management in North Sulawesi by BPKP Representatives of North Sulawesi Province by carryingout detection activities (methods) through:

- Operational Audit (Operational Audit)
- ➤ Goods and Services Procurement Audit (Probity Audit)
- Computer Forensic Audit (EDP Audit)
- Complaint Service (Whistleblower System)

These activities are applicable and function effectively in detecting various frauds that occur in regional financial management through routine supervision methods (reviews) on organizational operations, real time reviews of procurement goods/services, support for IT expertise and technology, as well as in the form of complaints both internally and externally to the organization. Especially for Computer Forensic and Whistleblower system has not been implemented optimally because this method is still relatively new and is still under development.

Implementation of an Investigative Audit on the handling (repressive) of fraud in regional financial management in North Sulawesi by BPKP Representatives of West Sumatra Province by carrying out assignment activities in the Investigation Sector including:

- ➤ Investigative Audit
- ➤ Audit for Calculation of State Financial Losses
- Provision of Expert Information

Assignments in the investigative field carried out are applicable and function effectively in handling fraud cases revealed in regional financial management, even not only being repressive but also preventive in the context of providing a deterrent effect for fraud perpetrators to no longer commit fraudulent acts. . In its implementation, it has been carried out optimally with the measure of achievement of performance targets in the report on the results of the investigative audits carriedout, although there are still shortcomings such as in the implementation of investigative audits so far only carried out on the basis of the request of Law Enforcement Officials, have not been proactively carried out on the development of operational audit results and of complaints in accordance with the provisions of the regulations.

Closing the conclusion, it is realized that prevention (preventive) fraud (corruption) is more effective than repressive efforts, therefore to combat systemic fraud (corruption) needs to be handled with a systematic and reliable prevention pattern as well as by adopting and developing a forensic accounting approach. and investigative audits which in their form use specific attributes which are a deepening or strengthening of the good governance system.

Suggestions

Basically, the system formulas and methods that have been designed and made by the government in an effort to prevent and eradicate fraudulent practices in the management of state finances, especially in regional governments, are ideal at the conceptual level accompanied by strengthening in the legal aspects of statutory provisions. From a theoretical point of view, it is also appropriate in terms of forensic accounting and investigative auditing related to this research topic. However, based on existing data and facts, it seems to be the opposite of expectations, seeing the development of cases of fraud (corruption) which is relatively high from year to year and places the Regional Government as the highest fraud perpetrator institution compared to other institutions.

Therefore, if you look further at the implementation and implementation of existing systems and methods, it is found that generally these systems and methods are still not carried out optimally with various obstacles and obstacles, especially in terms of fraud prevention which is the focus of the government. should. Therefore, the researcher on this occasion suggests several things

as follows:

BPKP representatives as APIP mentors in the Regional Government, should further intensify the development of SPIP and FCP in the regions consistently and evenly. In particular, many FCPs are still unknown ('grounded') by regional ASN and not widely understood by regional APIPs, agency officials, and regional leaders.

BPKP needs to equip and support the competence and expertise of the existing HR auditors, especially in the field of Investigation at BPKP Representatives to answer the demands of advances in information technology, which makes practices also more diverse sophisticated, such as the development of very useful Computer Forensic practices. to uncover fraud in today's digital environment, besides continuing to develop skills in accounting, auditing, law, criminology, IT, andothers. Training activities, workshops, and so on related to competency improvement need to be considered to be more active in efforts to develop higher quality human resources.

BPKP should consider the needs in the context of optimizing organizational performance including equal distribution of the quantity of human resources (number of personnel) according to workload analysis, increasing human resource capacity (training and certification), adequate budget, improving auditor welfare on a performance basis, and other facilities. Supporting facilities (tools and equipment) in carrying out special assignments at BPKP Representatives.

BPKP should carry out assignments in the field of Investigation independently and thoroughly in accordance with existing provisions and regulations, which basically have given authority to BPKP to carry out it proactively, of course supported by technical implementation rules instruments (juknis/juklak) from the Center.

BPKP and the Regional Government must synergize more in developing existing tools (systems and methods) in the context of preventing and eradicating fraud. The role of APIP in the region as aworking partner of BPKP in overseeing the development and administration of government in the region must continue to be intensified with efforts to increase the capacity of APIP in the through active coordination communication, interactive assistance, education and knowledge sharing/transfer which should be complementary. and various trainings. socializations, workshops that are evaluated on an ongoing basis so that the local APIP can eventually be drawn to its capacity not only to provide assurance but to become a consultant.

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