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Forensic accounting and fraud prevention in Indonesia public sector

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Abstract

Today, forensic accounting is a highly talked about topic all over the world and is the fastest growing area of accounting. The importance of professional forensic accountant cannot be over emphasized, especially to the public sector. The purpose of this study is to examine forensic accounting as a tool for fraud detection and prevention in the public sector organizations with particular reference to Indonesia. Both primary and secondary sources of data were appropriately used. 200 questionnaires were administered to staff of four (4) ministries in Indonesiawhich included into the top 10 of integrity survey of public sectorheld by Corruption Eradication Commission (KPK), along with interviews conducted with those ministries out of which 173 were filled and returned. Tables and simple percentages were used to analyze the data. The statistical tool used to test hypotheses was Analysis Of Variance (ANOVA). Among the findings was that the use of forensic accounting do significantly reduces the occurrence of fraud cases in the public sector. Therefore the use of forensic accountants can help better in detecting and preventing fraud cases in the public sector organizations in Indonesia. (Study in Indonesia Ministry which included as the biggest 10 indicatef by the result of public integrity survey by Indonesia anti-corruption commission).

KEY WORDS:

forensic accounting, fraud detection, fraud prevention, public sector

INTRODUCTION

Fraud is a universal problem that no one country is immune to it. In Indonesia, especially in cases of fraud as the public sector does not stop popping up. Results of a survey conducted by KPMG in 2010 even put a caretaker Indonesia together with China in the case of fraud in the region far below Hong Kong, Japan, Pakistan, the Philippines, Singapore, India, Vietnam, Sri Lanka, Bangladesh, Malaysia and Thailand (KPMG, 2010).

Recent studies Transparency International (TI) on the BPI (BPI Bribery Payers Index) in 2011 put Indonesia in the number 25 of the 28 countries surveyed related to bribery in business. BPI taking bribes by business people against state officials outside the country where the business group (Bribe to foreign official). Indonesia in 2011 has a BPI of 7.1 from an average of 7.8.

Several international bribery cases that occurred in Indonesia has been revealed. For example, the company Siemens of Germany, who was suspended fine of 201 million euros for committing bribery to win tenders projects, one of them in the development process Paiton II in East Java in 2007. Then bribery committed by the company Innospec against several public officials in Indonesia with regard to the use of chemicals in products TEL fuel in Indonesia. Recent cases, copper and gold mining company Freeport McMoRan America reported by the United Steelworkers in America to the U.S. Department of Justice as indicated to illegal payments to Indonesian security forces.

Various cases of fraud occurring and involving the public sector during this later led Indonesian corruption perception index position (as measured by the level of perceived public sector corruption) up to order 118 of the 176 countries with a score of 32 in 2012. In the ASEAN region, Indonesia's position is far below Singapore, Brunei, Malaysia, Thailand and the Philippines (Transparency International, 2012).

The phenomenon of fraud in the public sector in Indonesia is a serious problem and requires a more sophisticated approach to the detection and prevention efforts. One modern approach who are currently widely used to detect and prevent fraud is forensic accounting. According to Hansen (2009), forensic accounting is the best tool in detecting and investigating fraud. Degboro and Olofinsola (2007) describes the application of methods of forensic accounting as Criminal, and the integration between the activities of investigative accounting and legal procedures for detecting and investigating financial crime and crime-related accounting. According to Dhar and Sarkar (2010), forensic accounting, which is also called the accounting fraud investigation or audit, is a merger between forensic science and accounting.

Research objectives

The purpose of this study was to determine whether the use of forensic accounting can help reduce cases of fraud in the public sector in Indonesia.

THEORETICAL FRAMEWORK AND HYPOTHESIS

White Collar Crime Theory

The basis theory for this study is the white collar crime theory that was first popularized by Edwin Sutherland in 1939. Sutherland (1983) defines white collar crime as a form of crime committed by people who have a high social status and respect associated with his work. It means a form of white-collar crime is a crime committed by specific individuals and specific. Specificity lies in the socio-economic status is concerned, which is derived from the above and related economic activity and employment or position in question.

Moreover, Sutherland (1983) states that white collar crime is a crime relating to the breach of trust that is owned by the performer through the work that resulted in social disorganization or loss is so great. White-collar crime is generally done in the world of business or bureaucracy. Measure used to distinguish one white collar crime of other crimes is that the measures implemented as part of the job role is being violated, a role that usually occupy the world of business, politics or profession.

According to Sutherland (1983) criminal behavior is learned behavior and copied. Public officials learn to be corrupt after observing their coworkers while justifying their crime as normal behavior for later copied and followed. The white-collar criminals are opportunists, who over time learn to take advantage of their positions in order to accumulate money. They usually are the ones who educated, intelligent, rich, the people who is qualified to obtain a high position (Sutherland, 1983).

The white-collar criminals are often able to circumvent the criminal act did by hiding behind the class structure and economic and social class are more likely to blame individuals with lower social status, which incidentally is the subordinate or subordinates of offenders the white collar (Braithwaite, 1985). Therefore, according to Fredrichs (2007), due to the high status of the white-collar criminals, the investigators are highly trained and experienced professionals such as accountants or forensic auditor absolutely necessary to prevent the high rate of fraud.

FRAUD

Fraud generally constitute a tort committed/against the law by people from inside or outside the organization, with the intent to obtain personal benefit or group that directly harm others (ACFE, 2012). Nonetheless, several organizations and individuals try to define fraud in accordance with their respective viewpoints. For example, Black Law Dictionary (1990) defines fraud as "any deliberate disregard for the truth or the declaration of a state of a concealed material facts that could influence others to commit an act or acts that harm."

According to the Australian Commonwealth Fraud Control Guidelines (2002), fraud is "the acquisition of profit by deception / fraud or the like." This definition includes, among others: (1) burglary, (2) obtain advantages, or others with fraud/cheating, (3) avoid or obligations to fraud, (4) makes a mistake or spread misinformation to the public, or not disseminate/fake information when it is required, (5) making, using, or have a false/fake document; (6) bribery, corruption, or abuse of position, and (7) any other violations.

Schematically The Association of Certified Fraud Examiners (2012) describes occupational fraud in the form of fraud tree. This tree illustrates the branches of fraud in the employment relationship, and their branches and subsidiaries branches. ACFE divide Fraud into 3 (three) types or typologies based actions are:

1) Asset misappropriation;

Asset misappropriation covers misuse / theft of company property or assets or any other party. This is a form of fraud is most easily detected because it is tangible or can be measured / calculated (defined value).

2) Fraudulent statement;

Fraudulent statements include actions taken by officials or executives of a company or government agency to cover the actual financial condition to perform financial engineering (financial engineering) in the presentation of its financial statements to obtain benefits or may be analogous to

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the term window dressing.

3) Corruption.

This type of fraud is the most difficult to detect because it involves cooperation with other parties such as bribery and corruption, where it is the kind that most occur in developing countries that weak law enforcement and still less awareness of good governance so that the integrity factor is still questionable. This type of fraud often can not be detected because the parties are working together enjoying the benefits (symbiosis mutualism). This includes the abuse of authority / conflict of interest, bribery, receipt of unauthorized / illegal gratuities, and economic extortion.

FRAUD TRIANGLE

Donald R. Cited by Tuanakotta Cressey (2010) made a classical model to explain occupational Offender or perpetrators of fraud in connection with the working hypothesis that the last person who is believed to be violators of confidence when he sees himself as a person who has financial problems that can not be told it to someone else , aware that this problem can be secretly resolved by abusing his authority as the holder of the trust in the financial sector, and the day-to-day behavior allows to adjust the view of him as someone who can be trusted in the use of funds or property entrusted. In a further development of this hypothesis is known as the fraud triangle or triangle cheating.

Fraud Triangle shows that someone did fraud based on 3 factors, namely:

- 1. *Pressure*. Cressey believe that the perpetrators of fraud stems from the pressure on him. Performers have urgent financial needs which were not told to anyone else. An important concept is the crushing pressure of his life (need for money), but he can not share with others.
- 2. *Opportunity*. Perpetrators of fraud have the perception that there is an opportunity for him to commit the crime without anyone knowing. Cressey argues that there are two components of the perception of opportunities. The first, general information, which is the knowledge that the position of trust or confidence contained, can be violated without consequence. This knowledge can be gained from what he heard or what he saw. The second is a technical skill or expertise / skills required to carry out the fraud.
- 3. Razionalization or seek justification before committing fraud and not

after. Justification is the part that must be in itself a crime, even a part of the motivation of the perpetrator.

FORENSIC ACCOUNTING

Forensic accounting fraud arose because of the rapid growth that occurs. Forensic accounting is the application of the accounting discipline in its broadest sense, including auditing on legal issues for legal settlement inside or outside the court (Tuanakotta, 2010). Thus the application of forensic accounting is accounting discipline based on those skills in investigating and analyzing which aims to resolve the financial problems that is based on rules established by law. Forensic accounting is usually focused on specific areas that indicated the occurrence of acts of fraud either in the report or the third party to the fraud or instructions.

Forensic accounting can be applied in the public and private sectors. According to D. Larry Crumbey in Tuanakotta (2010) in a simple forensic accounting can be regarded as an accurate accounting for legal purposes or accounting -tested in the arena of dispute during the trial or in the process of judicial review or administrative review. Forensic accounting is defined as accounting analysis that may uncover fraud which may be particularly suitable for disclosure in court. Such analysis will be the basis for a resolution of the discussion, debate, and disagreement. A forensic accountant uses his knowledge of accounting, legal studies, investigations and criminology to uncover fraud, find evidence and further evidence will be brought to court if needed (Ramaswamy, 2007). In conclusion, forensic accounting is the application of accounting disciplines in the resolution of legal issues both inside and outside the court. Forensic accounting terms in this definition can be used in a broad sense, including audits and auditing. The thing that sets accounting and accounting audit is related to the calculation while the audit related to the search to ensure the fairness of certainty or what was reported. Thus, forensic accounting embraces all kinds of activities accounting for legal purposes.

Forensic accounting in the public sector in Indonesia is more prominent than in the private sector forensic accounting In general, forensic accounting is no different in the two sectors, there is a difference only in the latter stages of a whole series of forensic accounting is divided in various institutions such as the state audit institutions, the internal supervisory of government, the judiciary, NGOs and various institutions (Non Governmental Organization) which serves as a *pressure group* (Tuanakotta, 2010).

ROLE AND FORENSIC ACCOUNTANT SKILL

Understanding of fraud and forensic accounting techniques that can effectively help in identifying forensic accountant illegal activities as well as find and keep the evidence (Houck et.al., 2006). The role of a forensic accountant is different from regular auditor. Auditors provide in accordance with auditing standards provisions and "merely" to give consideration of the possibility of fraud, while forensic accountants focus on the detection and prevention of fraud itself (Crumbley and Apostolou, 2005).

Roche, as cited by Crumbley and Apostolou (2005), describes a forensic accountant as someone who can see the face behind the mask, have a suspicion (assume that) no documents or shown may not match what actually. Krell (2002) mentions that the forensic accounting often involves a complete and detailed effort to penetrate concealment tactics.

As an investigator, forensic accountant can be seen as the people who specialize in detecting fraud, especially in documenting the evidence necessary for a criminal prosecution, able to work in an environment of complex regulatory and litigation, and with reasonable accuracy, can reconstruct the accounting records lost, destroyed or lie. Meanwhile, as an economist, forensic accountants are very effective on the estimated economic loss, damage and loss of social, familiar with the assumptions, algorithms, and computation in the econometric models and the opportunity cost scenario, can measure and calculate things such as loss of goodwill and reputation (Bologna and Lindquist, 1995).

According to Robert J. Lindquist in Tuanakotta (2010) a forensic accountant should have the following qualities:

- 1) Creative, ability to see things that other people consider a normal business situation and then consider other interpretations.
- 2) Curiosity, the desire to find out what really happens in a series of events and situations.
- 3) Not giving up, the opportunity to move forward undeterred despite the fact (as it were) does not support.
- 4) Common sense, the ability to maintain a real-world perspective.
- 5) Business sense, the ability to understand how to actually run a busi-

ness, and not just to understand how security be recorded.

6) Self-confidence, the ability to believe in themselves and findings.

More specifically, a forensic accountant should have knowledge, skills and abilities in the following areas (Houck et al., 2006):

- 1) Criminology, particularly those oriented to the nature, dynamics, and scope of fraud and financial crime, environmental laws, regulations, and professional environment, as well as ethical issues.
- 2) Pencegahan, prevention, deterrence, detection and fraud nvestigation and remediation in the following areas: asset misappropriation, corruption and fraudulent financial statement.
- 3) Forensic and litigation advisory services, including analysis and research, loss and damage assessment, investigation dispute, and conflict resolution (arbitration and mediation).

Hypothesis

The use of forensic accounting a significant effect in reducing the occurrence of cases of fraud in the public sector in Indonesia.

Resarch methodology

This study focused on the detection and prevention of fraud in the public sector in Indonesia. The study was conducted at four ministries that ranked among the top 10 Public Sector Integrity Survey conducted in 2012 by the Corruption Eradication Commission (KPK) is a ministry of education and culture, ministry of health, ministry of commerce and ministry of forestry. The scope of the study covers the period 2008 to 2012.

This research design using survey methods by collecting data from a population. In an effort to gather information useful and reliable, then used two data sources namely primary and secondary data sources. Primary data were collected through questionnaires and instruments wawancara. Untuk collect primary data, a random sample of 200 respondents, namely the stafsenior and top management from 4 ministries, has been selected to participate in this study.

The data collected is processed and presented in a more informatif. Selanjutnya, the hypothesis proposed in this study were tested using statistical methods Analysis of Variance (ANOVA) with the help of SPSS software.

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Results of the research

From the 200 questionnaires distributed to the senior staff and the top management of office of the ministry of education and culture, ministry of health, ministry of commerce and ministry of forestry, which totaled 173 completed and returned the questionnaire (87%). Perceptions of respondents to each question about their views on the use of forensic accounting as a tool to detect and prevent fraud in the public sector are presented as follows:

Answer	Number of Respondents	Percentage	
Yes	128	74%	
No	45	26%	
Total	173	100%	

First question: Do you know about forensic accounting?

Sources: Data from 2013 survey

Table 1 above shows that 128 respondents or 74% of the total respondents knew about forensic accounting while 45 respondents or 26% of the respondents did not know about forensic accounting.

Second question: Do you understand the concept of forensic accounting?

Answer	Number of Respondents	Percentage	
Yes	124	72%	
No	48	28%	
Total	173	100%	

Sources: Data from 2013 survey

Table 2 above shows that 124 respondents or 72% of the total respondents understand the concept of forensic accounting while 48 respondents or 28% of the respondents did not understand the concept of forensic accounting. It also implies that 124 of the 128 respondents who knew about forensic accounting, also understand the concept of forensic accounting.

Answer	Number of Respondents	Percentage	
strongly agreed	38	22%	
agree	73	42%	
disagree	52	30%	
strongly disagree	10	6%	
Total	173	100%	

The third question: forensic accountant services needed in Indonesia?

Sources: Data from 2013 survey

Table 3 above shows that 38 respondents or 22% of the total respondents strongly agreed, 73 respondents or 42% of respondents agreed, 52 respondents or 30% of the respondents disagreed, while 10% of respondents stated or 6% respondents strongly disagree. This means that the majority of respondents (66%) agree that the services of forensic accountants are needed in Indonesia.

The fourth question: forensic accountant services needed more in the public sector?

Answer	Number of Respondents	Percentage	
strongly agreed	47	27%	
agree	78	45%	
disagree	40	23%	
strongly disagree	8	5%	
Total	173	100%	

Sources: Data from 2013 survey

Table 4 above shows that 47 respondents or 27% of the total respondents strongly agreed that more needed services of forensic accountants in the public sector, 78 respondents or 45% of respondents agreed, 40 respondents or 23% of the respondents disagreed while 8 respondents atau5 % of respondents strongly disagree. This means that the services of forensic accountants are needed more in the public sector.

Answer	Number of Respondents	Percentage	
strongly agreed	71	41%	
agree	57	33%	
disagree	35	20%	
strongly disagree	10	6%	
Total	173	100%	

The fifth question: Forensic accounting can assist in detecting and preventing fraud in the public sector?

Sources: Data from 2013 survey

Table 5 above shows that 71 respondents or 41% of the total respondents strongly agreed that the forensic accounting can assist in detecting and preventing fraud in the public sector, 57 respondents or 33% of respondents agreed, 35 respondents or 20% of respondents disagreed while 10% of respondents stated or 6% respondents strongly disagree. This indicates that the forensic accounting can assist in detecting and preventing fraud in public sector in Indonesia.

Hypothesis Testing

Based on calculations with SPSS output obtained ANOVA (F test) as follows.

Table 6

ANOVA						
Mode		Sum of Squares	ďf	Mean Square	F	Sig.
woue	1	Squares	u	Wearr Square	F	Siy.
1	Regression	99.479	2	49.739	187.731	.000a
	Residual	45.042	170	.265		
	Total	144.520	172			
a. Predictors: (Constant), VAR00002, VAR00001						

b. Dependent Variable: VAR00003

Sources: Output SPSS 19.0

Based on Table 6 above the note F_{count} value is equal to 187.731. With a significance level (α) = 0.05 and df1 = 2 and DF2 = 170 F_{table} values ob-

tained at 3.05. It can be concluded that the value $F_{count} > F_{table}$, meaning that Ho will be rejected indicating that the use of forensic accounting a significant effect on the reduction of fraud in the public sector.

CONCLUSIONS AND RECOMMENDATIONS

The results showed that the use of forensic accounting can significantly affect the reduction in cases of fraud in the public sector. Thus, the services of a forensic accountant would be required by the public sector in Indonesia.

From the results of oral interviews found that the practice of forensic accounting in the public sector in Indonesia is still performed by the "normal" external auditor, therefore cases of fraud in the public sector is still and keep on going. Therefore, it is recommended that the government should be paying particular attention to the development of forensic accounting as a strategic and dynamic tool to detect and prevent fraud in the public sector in Indonesia. In addition, it is suggested to public and private institutions in order to create programs that will produce accountants who are experts in the detection and prevention of fraud.

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