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Skills of the Forensic Accountants in Revealing Fraud in Public Sector: The Case of Indonesia

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Abstract:

Research aims: This paper aims primarily to investigate the effect of the skills of forensic accountants on the public sector in revealing fraud in Indonesia. Therefore, this research focuses on the investigation of forensic accountants in the public sector.

Design/Methodology/Approach: This study employed a quantitative approach with a survey method. Questionnaires were distributed to the auditors possessing experiences to conduct investigative auditing in the Audit Board of the Republik of Indonesia (BPK RI). In total, 44 respondents returned the questionnaires, which can be considered suitable for a descriptive survey.

Research findings: The results showed that the investigative skill and business valuation affected significantly and positively, and then business skill had significant and negative effects on the skills of forensic accountants in revealing fraud in the public sectors. On the other hand, financial accounting skills had no significant impact on the skills of forensic accountants in revealing fraud in the public sectors.

Theoretical contribution/Originality: This paper highlights various important skills possessed by forensic accountants in the public sector in revealing fraud in Indonesia.

Practitioner/Policy implication: This paper contributes as the basis of institutions' concerns such as recruiting future forensic accountants in the public sectors, and training and upgrading related to the investigative skill, and business valuation which is compulsorily possessed by forensic accountants.

Research limitation/Implication: This study focused on the public sectors, in this case, the Audit Board of the Republik of Indonesia representative of Yogyakarta province, and on succinct respondents. Future studies should add more institutions and respondents involved in the analysis process to gain a complete representation of the skills of forensic accountants.

Keywords: Skills; Forensic; Accountant; Accounting; Public Sector; Fraud; Indonesia

Introduction

In the last one decade, there emerges a drawing attention issue worldwide which points to financial crimes figured in fraud or corruption, both in non-profit public/governmental sectors and profit private sectors (Association of Certified Fraud Examiners, 2012). Furthermore, in accordance with a study conducted by the Association of Certified Fraud Examiners (2012), financial fraud that occurs around the world

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

contributes as much as 10% of the incidents of white-collar crime. Misuse assets and corruption, for example, occur in a more significant frequency, but the latter crime, which is corruption, leads the most severe impact of other frauds.

In Indonesia, it is not only government officials of the executive, legislative, and judiciary who can undertake corruption, but private individuals can do so (Hamdani, Kumalahadi, & Urumsah, 2017). Nevertheless, most corruption cases happen in public sector institutions. For that reason, the government mainly focuses on the attempt to eradicate and reveal fraud cases which inflict a financial loss of the country. In this case, the role of a forensic accountant is crucial for public sector institutions. A forensic accountant is compulsorily required to possess distinctive expertise and skills compared to a traditional accountant. Forensic accountants play a critical role in the government system in which they are necessary to investigate suspicious financial activities and track down actual fraud (Salleh & Aziz, 2014). According to the result of the survey Transparency International (2015), Indonesia gained 36 for the score of the Corruption Perception Index (CPI). It placed the country in the position of 88 out of 168 countries being measured. The score increased 2 points in 2015 and led the country to elevate 19 ranks compared with that was in 2014. The elevation of the score and CPI rank in 2015 is worth appreciating as the result of the collaboration between the governments, civil societies, and stakeholders in their attempt to prevent and eradicate corruption, which is the efforts of the Audit Board of the Republik of Indonesia (BPK) by increasing cooperation between state institutions and also with the Supreme Audit Institution (SAI) with other countries to prevent corruption. Besides, to facilitate the implementation of audits and to detect early acts of corruption, BPK is developing an electronic audit (eaudit).

Kahan (2006) proposes that forensic accountants are continually involved in the company's financial activities along with shareholders and governmental institutions to prevent accounting fraud. It leads to extend the role of forensic accountants in detecting and preventing fraud in every economic activity. Besides, complex financial transactions are easier to be addressed by competent experts (Rezaee, Crumbley, & Elmore, 2004). It is implied that auditing experiences are not making the auditors or fraud examiner to be skillful in detecting fraud (Krambia-Kapardis, 2002). Moreover, Rezaee et al. (2004) posit that one of the skills necessarily acquired to address financial fraud cases is the skill in forensic accounting. Based on the mentioned opinions above, it can be concluded that a person possessing expertise in forensic accounting is more frequently involved in the investigation of fraud and will be able to detect it more easily.

Harris and Brown (2000) illuminate that forensic accountants have, in essence, conceived the principles of criminal law, civil law, and court procedure. Also, the skills in investigation, including theories, methods, and fraud patterns, must be managed by forensic accountants. It also covers the ability to think creatively to learn and perceive tactics which are potentially played by the fraudsters (Harris & Brown, 2000). Besides, forensic accountants are necessary to communicate findings obviously and in detail with some parties, including people who are familiar with accounting and auditing. According to Brooks, Riley, and Thomas (2005), forensic accountants focus on investigating

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

suspicious financial activities and fraud performed by individuals or businesses. They also act a more evidently job to assist the government to evaluate accounting records and financial transactions, both through banking and direct transactions, which are suspected to proceed from fraud. Based on an extensive literature study and deep understanding of forensic accounting in Indonesia, this research aims primarily to investigate the effect of the skills of forensic accountants on the public sector in revealing fraud in Indonesia. Therefore, this study will focus on the investigation of forensic accountants in the public sector.

Literature Review and Hypotheses Development

In Indonesia, the term forensic accountants have been introduced since 1988 in Accounting magazine No. 10 of 1988 (Karni, 2000), which stated that the forensic accountants are no different from the existing public accountants, only in public accountants, they aim to give an opinion on the financial statements those who are examined and sometimes also find fraud, while the forensic accountant does seek to investigate the possibility of fraud, especially against organizations that have been cheated or have poor performance.

Then, forensic accounting is defined as the application of accounting in the broadest sense, including auditing, to legal matters for legal resolution inside or outside the court, in the public or private sector (Tuanakota, 2010). Auditing here refers to the collection and evaluation of evidence about information to determine and report the degree of conformity between the information with the established criteria (Arens, Elder, & Beasley, 2008). Thus forensic accounting consists of investigative audit and loss accounting (Tuanakota 2010).

Concurrently, some researchers began to inquire about distinctive skills and technical skills possessed by forensic accountants (Cohen, Crain, & Sanders, 1996); (Harris & Brown, 2000); (Messmer, 2004); and (Ramaswamy, 2005). It is also related to experiences that are possible to be improved (Grippo & Ibex, 2003). Digabriele (2008) extended research by surveying accounting academics, forensic accounting practitioners, and forensic accounting users to determine more relevant skills that are necessarily possessed by the forensic accountants. The result showed that the three main stakeholder groups argue differently at the items of knowledge and skills, but agree to all elements of the performance. It is also evidence that the academics and practitioners own more agreement to the importance of expertise of the forensic accountants than that of the forensic accountant users.

Hodges and Burchell (2003) stated that accounting graduates are necessary to possess the combination of cognitive skills (technical knowledge, skills, and competencies) and self characteristics (principles, traits, and motivational values), which are the function of individuals' personalities. In the last a few years, some academics have indicated that the skill such as emotional intelligence (the ability to recognize, utilize and control emotion) is crucial to be involved in the world because it is central to all processes of

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

making rational decisions (MacPhail, 2004). Some other experts have suggested that emotional intelligence has been possibly triggering accountants to perform better in some parties such as leadership, client relation, and even decision making (Bay & McKeage, 2006). Moreover, Akers and Porter (2003) have encouraged the American Institute of Certified Public Accountants (AICPA) and Management Accounting Institute to acknowledge emotional intelligence as an essential skill for the success of accountants' profession in the future.

Furthermore, Tan and Libby (1997) classified auditing skills into two categories: (1) technical skills and (2) non-technical skills. Technical skills are the basic skills possessed by an auditor, which are manifested in the procedural knowledge and other clerical abilities in the scope of general accounting and auditing. According to Bonner and Lewis (1990), the skills cover three types: (1) the knowledge of accounting and auditing, (2) the sub-special knowledge (derivative contract), and (3) the knowledge of the general business. Harris and Brown (2000) have identified the necessary skills and technical skills of forensic accountants. They are generally familiar with criminal law and civil law and conceive the courtroom procedure and prospect. The researchers also emphasize investigation skills, including theories, methods, and patterns of misuse or fraud. The forensic accountants think creatively about considering and conceiving the tactics used by the actors of fraud to conceal their actions. Besides, they also need to communicate their findings clearly and succinctly with some parties, including some people who are familiar with accounting and auditing. On the other hand, non-technical skills cover interpersonal skills, which include the ability of communication, leadership, cooperation, and relationship (Murtanto & Gudono, 1999). Meanwhile, Tan and Libby (1997) group it into interpersonal skills, psychological characteristics, and cognitive abilities.

The previous classifications have elaborated that some skills of the forensic accountants such as analytical skill, communication skill, computing skill, technological skill, and investigative skill are categorized into crucial or core skills (Albrecht, Albrecht, Albrecht, & Zimbelman, 2012; and Davis, Farrell, & Ogilby, 2010). According to experiences, financial accounting, taxation, business valuation, business skill, risk management internal control, communication (Grippo & Ibex, 2003), and other abilities such as fraud scheme (Albrecht et al., 2012) are crucial in the future. Moreover, some forensic accountants' skills that are crucially needed to be upgraded are financial accounting, legal skill, and risk management internal control (Davis et al., 2010).

Thus the classification of exposure to the expertise of a forensic accountant by (Albrecht et al., 2012; Davis et al., 2010; Grippo and Ibex, 2003; Tan and Libby, 1997; Hodges and Burchell, 2003; Bonner and Lewis, 1990; Harris and Brown, 2000; Murtanto and Gudono, 1999; Kranacher, Morris, Pearson, and Riley, 2008; Fenton and Edmund, 2011; and Digabriele, 2008) the researchers broadly classified into four attribute skills to be studied, namely: financial accounting, investigative skills, business valuation, and business skills.

Forensic accountants are currently applying their unique expertise for diverse tasks and are often hired to determine whether there has been any deliberate misrepresentation

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

related to the company's financial records (Digabriele, 2008). Fraudulent misrepresentation can range from overvaluation of inventory and improper capitalization of costs for misstatements profit and embezzlement (Harris & Brown, 2000; and Messmer, 2004). A professional forensic accountant is measured from the possessed skills in performing the profession (Morrow & Goetz, 1988). The professionalism is also related to specific skills to reveal the fraud frequency acted by the violators (Kalbers & Fogarty, 1995). The person who possesses it in the work field shows genuine abilities to create new ideas.

Furthermore, Tuanakotta (2010) identifies the quality of a forensic accountant as being cautious, keeping confidential work, being creative, persevering, having courage, showing integrity, and being persistent in collecting broader information, which possibly triggers the accountant to apply the skills as an investigator effectively immediately. All of them are conducted through the knowledge of financial concepts and deriving conclusions. It also involves the ability to connect with people. Generally, it needs to deal with people in a higher position and necessarily maintains its current status. Fraud examiners frequently meet people in limited time for a specific reason, which is collecting information.

Further and more specific Tuanakota (2010) said the quality that a forensic accountant must have, namely; (1) creative, the ability to see things that other people consider a normal situation and consider the interpretation of others, (2) curios, a desire to find out what happened in a series of events and circumstances, (3) do not give up, when documents or information difficult to obtain, (4) common sense, the ability to maintain a real-world perspective, (5) business sense, the ability to understand how the business is running, and not just understanding how the transaction was recorded, and (6) self-confidence, the ability to trust yourself and the findings held.

Fraud has existed for generations (Prabowo, 2013). Since before the Industrial Revolution, the financial scandals have plagued the world's economy (Pearson & Singleton, 2008). For example, in the 1970s, the Equity Funding Scandal was uncovered, and it is one of the first major financial scandals where computers were used to assist in perpetuating a fraud (Pearson & Singleton, 2008). In the banking process for lending credit and interest in Eastern Europe and Russia, bribery is done to get the access and ease the credit (Webster, 1993; and De Melo, Ofer, & Sandler, 1995). In Lebanon, the same survey showed that lending would not be agreed without doing bribery (Yabrak & Webster, 1995). According to the Black's Law Dictionary (2009), fraud is:

A knowing misrepresentation of the truth or concealment of a material fact induced another to act to his or her detriment [...] A misrepresentation made recklessly without belief in its truth induced another person to act [...] A tort arises from a knowing misrepresentation, concealment of material fact, or reckless misrepresentation made to induce another to act to his or her detriment.

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

Furthermore, Ramamoorti (2008, p. 522) argued:

"Fraud involves intentional acts and is perpetrated by human beings using deception, trickery, and cunning that can be broadly classified as comprising two types of misrepresentation: suggestio falsi (suggestion of falsehood) or suppressio veri (suppression of truth)".

Based on his Ph.D. study, by examining the employees who steal company money (embezzlers), Donald Cressey interviewed 200 people imprisoned for the fraud. The study showed that the occurrence of fraud occurring through the so-called "fraud triangle," namely pressure or motivation, opportunity, and rationalization (Cressey, 1953). The increase in fraud can be caused by political, economic, and historical rationales (Damania, Frediksson, & Mani, 2003). Those rationales are in the form of policy distortion done by the regime governing the country. Moreover, Alatas (1986) explains some factors causing the corruptions such as (1) the weaknesses of the leader in the primary position, (2) the weaknesses of religion and moral ethics, (3) colonialism, (4) low level of education, (5) poverty, (6) undemanding law, (7) unsupportive environment, (8) government structure, (9) radical transition, and (10) the bad condition of the society.

Subsequently, the Association of Certified Fraud Examiners (2012) classifies fraud into three types of occupational, namely; Corruption, Asset Misappropriation, and Financial Statement Fraud. Specifically, there are Acts regulated about corruption in Indonesia, which is Acts Number 20, 2001, as the revision of Acts Number 31, 1999, about the eradication of corruption. The act of corruption in Acts Number 20, 2001, is mentioned in Article 1 and 3. With the existed Acts, perpetrators should have been arrested by the law upholders (KPK, Judiciary, and the Police). People who are going to do the act of corruption are supposed to be afraid of and are not willing to do corruption because of the threat mentioned in the Acts. However, the phenomenon happens vice versa – there are still many corruption acts in Indonesia. The perpetrators seemed not afraid of the judgment. Moreover, they even can smile and wave their hands in front of the mass media and electronic media like an innocent person (Merdeka.com, 2013; Viva.co.id, 2013; and Wartabuana.com, 2014).

Corruptions obstruct development and democracy (Cwati, 2004). According to Bayley (1988), some effects of corruptions are as follows: (1) the vanishment of efficiency and the appearing of wasting that leads to loss because obstructing the economy development, (2) the increase of administrative cost, (3) the decrease of the amount of money which is supposed to be used for society, (4) the failure of morality and attitude in the community, (5) the decrease of society' trust towards the government, and (6) the classical endless cycle which triggers others to do the same action.

According to Tanzi (1998), corruptions lead to distortion in the market and cause the inappropriateness of resources allocation because it will (1) decrease government's ability to supervise the regulations needed and to inspect to correct market failure, (2) lead incentive distortion, (3) act as an arbitrary tax with a high wealth cost, (4) decrease and distort the fundamental role of government, (5) decrease the legitimization of

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

market economy and democracy, and (6) tend to increase poverty because it reduces the potential income of the poor. Moreover, Pope (2000) states that corruptions threaten not only the environment, human rights, democratic institutions, and the freedom of fundamental rights but also obstructs the development and the solution of poverty.

In the United Nations Convention Against Corruption (UNCAC) foreword, Kofi Annan (The Former of UN General Secretary) states that the effect of corruptions is hazardous for the world citizens such as destroying democracy and law supreme, causing the violation of human rights, distorting the market, decreasing the life quality, and increasing organized crimes, terrorisms, and other threats to humanity. Moreover, it becomes the primary obstruction of solving poverty issues and development in the world (UNODC, 2004).

As a forensic accountant, a person must possess the knowledge of financial accounting, which is being the basis of the skills (Ramaswamy, 2005). It is because the accountant will seek financial managerial current and ensure whether the posting has corresponded to the standardized accounting basic system. Harris and Brown (2000) elaborate a similar idea that the skills of financial accounting influence the performance of forensic accountants in their work of revealing fraud.

The ability to understand financial accounting is recognized by Albrecht et al. (2012; Fenton and Edmund (2011); Kranacher et al. (2008); Ramaswamy (2005); Harris and Brown (2004); Peterson (2004); and Grippo and Ibex (2003). Throughout transactional an economy still exist and uses the money as legal tender. The role of accounting is always crucial for the accounting record of all business events of a financial nature. Merchandise sales, payroll, and credit purchases are examples of business events recorded accounting.

 $\mathbf{H_1}$: Financial accounting skill affects positively on the skills of the forensic accountant in revealing fraud.

Investigative skills are crucial factors for a forensic accountant because this type of accountant is not a traditional auditor. A forensic accountant is a financial expert who is investigating fraud acted by individuals misleading management and financial system or manipulating activities implying an institution's loss in the form of fraud (Digabriele, 2008). A forensic accountant must conceive the process of fraud investigation such as detecting fraud, proofs, methods, and reports (Prabowo, 2013). Then Hopwood, Leitner, and Young 92008) argue that trained forensic accountants possess investigative knowledge and skills. The investigation conducted by a forensic accountant is to uncover fraud acted by the suspect (Grippo & Ibex, 2003).

The investigative skills possessed a forensic accountant is supported by Digabriele (2008), Harris and Brown (2004), and Grippo and Ibex (2003). The investigative skill is the ability of forensic accountants to conduct a forensic audit is an audit action

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

combined expertise that includes membership accounting, auditing, and legal regulations in the hope that the results of these audits will be used to support the legal proceedings in the courts and other legal requirements. A forensic audit carried out to provide support in the process of legal expertise to testifying experts in litigation.

 \mathbf{H}_2 : Investigative skill affects positively on the skills of the forensic accountants in revealing fraud.

As a forensic accountant must have the skill to assess the overall business process. Forensic accountants are usually faced with several principles to evaluate the business processes of a person or an institution. A forensic accountant should be able to assess all aspects, both financial and non-financial. Conducting an assessment of business entities and business units needs a skill that should be attached to a forensic accountant. The magnitude of the project or the volume of work in a company or public organization unit it can be assessed at a particular unit price becomes vital for a forensic accountant (Messmer, 2004). The skill to evaluate the business units and activities of existing projects will facilitate a forensic accountant to determine the amount of fraud occurring (Kranacher et al., 2008).

The need for business valuation skills as the ability for forensic accountants is supported by Albrecht et al. (2012); Fenton and Edmund (2011); Kranacher et al., (2008); and Messmer (2004). These skills can be explained as descriptive (describing business) and explanatory (explaining the business) as a sound basis for assessing the evidence during the trial to uncover fraud measures.

 H_3 : Business valuation skill affects positively on the skills of the forensic accountants in revealing fraud.

Business skills on a business level unit concerning how a company is managed efficiently and strategically. Knowledge of the substance of things businesses to sharpen forensic accountants deepen the cases of fraud that occurred (Messmer, 2004). Then Elitaş, Karakoc, and Gorgulu (2011) argued that the skill understands the ways in managing a company or an organization in an efficient and strategic. Furthermore, Rezaee, Reinstein, and Lander (1996) suggest that the ability of a forensic accountant to understand and know the source of strengths or weaknesses an entity owned by public organizations; there is a logical consequence of the profession. This skill needed a forensic accountant for further investigation because of disagreement with the vision and mission of the organization is being investigated. The ability to analyze the business, both internal and external is supported by Elitas et al., (2011), Fenton and Edmund (2011), Krachnacher et al., (2008), Messmer (2004), Grippo and Ibex (2003), and Rezae et al. (1996).

 $\mathbf{H_4}$: Business skill affects positively on the skills of the forensic accountants in revealing fraud.

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

Research Method

This research employed a quantitative approach with a survey method. Broad information was collected from a group of concerned subjects. The variables investigated in this research consisted of financial accounting, investigative skills, business valuation skills, and business skills. The dependent variable was the skills of forensic accountants. Questionnaires were distributed to practitioners, namely the auditors who have conducted investigative audits in a government institution, namely the BPK representatives of Yogyakarta Special Region. The instruments of the survey were prepared to reveal five skills that were scientifically considered as crucial factors necessarily possessed by a forensic accountant. The rank of the answer was in 6 Likert scales, starting from 1 (strongly disagree) to 6 (strongly agree).

Both dependent and independent variables in this research were measured through dynamic values showing distinctive results of the measurement based on a certain scale or range (Cooper & Schindler, 2011). The conceptual scheme analyzed in this research consisted of some independent variables and one dependent variable, which were all measured continually. By doing so, multiple regression was used to test the hypotheses. This study uses SPSS software as a data analysis method.

The dependent variable in this study is the skill of a forensic accountant. Then, the independent variables in this study are financial accounting skill Ramaswamy (2005); DeGabriele (2008); and Kranacher (2008), using 7 statement items, investigative skill, Grippo and Ibex (2003); and Harris and Brown (2004), using 6 statement items, business valuation skill, Kranacher (2008); and Fenton and Edmund (2011), using 5 statement items, and business skills, Messmer (2004) and Elitas et al. (2011), using 4 statement items.

Result and Discussion

Data collection techniques used in this study is done by distributing questionnaires to the respondent. The questionnaire returned and completed by the respondent, then be examined for its completeness. 45 questionnaires were distributed to forensic accountants in the BPK Yogyakarta, but there were 44 valid questionnaires to be analyzed.

Table 1 shows the demographic characteristics of participants, including gender, education, age, length of work, and positions. Participants consisted of 19 males and 25 females with the highest level of education is a bachelor degree. The age of the majority is 31-40 years old, most of the length of the work is 5-10 years, and most of the positions are senior auditors.

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

Table 1 Demography Characteristics of Participants

Demography Characteristic		Number of Participants	Percentage (%)
Gender	Male	19	43
	Female	25	57
Education	Bachelor degree	27	61
	Master degree	17	39
Age	31-40 years old	42	95
	41-50 years old	2	5
Length of work	5-10 years	35	80
	10-20 years	9	20
Positions	Junior Auditor	4	10
	Senior Auditor	40	90

Table 2, shows out that P-Value 0.015 model is smaller than the significant level (0.015 < 0.05). It means that the regression model in this research is significant. For that reason, it depicts that the regression model can predict the skills of forensic accountants. In other words, there is sufficient proof to indicate that the regression model can predict the variables of the skills of forensic accountants.

Table 2 also shows that the value of Adjusted R Square is 0.189. This result indicates that the skills of forensic accountants can be explained by the independent variables in the regression model as much as 18.9%. The rest, which is 81.1%, is described by other variables of the models which are not tested in this research.

Table 2 Regression Results (n = 44)

Variable	(B-value)	<i>P</i> -Value	Results
(Constant)	4.469		
Financial Accounting Skill	-0.088	0.334	Not Supported
Investigative Skill	0.154	0.009***	Supported
Business Valuation Skill	0.173	0.047**	Supported
Business Skills	-0.105	0.082*	Supported
R Square	0.264		
Adjusted R Square	0.189		
Prob (F-statistic)	0.015**		

Notes: *p<0.1; **p<0.05; ***p<0.01;

Dependent variable is Skills of Forensic Accountant in revealing fraud.

Based on the information in Table 2, it indicates that there is three variable proved to influence the skills of forensic accountants significantly, which is an investigative skill, business valuation skill, and business skill. It is because P-Value of those three variables is smaller than the significant level of 1%, 5%, and 10% (0.009 for investigative skill, 0.047 for business valuation skill, and 0.082 for business skill). The coefficients of those two variables are positive (0.154 and 0.173). It shows that investigative skill and business valuation skills had a significant and positive effect on the skills of forensic accountants, then business skill had a significant and negative effect. On the other hand,

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

financial accounting skills did not affect the skills of forensic accountants in revealing fraud in the public sectors. Detail explanations of the result of the regression of each independent variable are depicted in the section below.

Concerning the result is shown in Table 2, it is derived that the P-value of financial accounting is 0.334. P-value is larger than the level of significance, so H1 is not supported. It means that the financial accounting skill had no significant effect on the skills of forensic accountants in revealing fraud. It is concluded that H1 in this research states that financial accounting skills affected negatively on the skills of forensic accountants in revealing fraud. In other words, a forensic accountant possessing financial accounting skills did not significantly affect the skills. It is implied that there was only a small chance to successfully revealed fraud in the public sectors in Indonesia. Differently stated, Harris and Brown (2000) discover that financial accounting skills affected the performance of forensic accountants in conducting their job to reveal fraud. It can be caused by the fraud itself that has a lot of classification, so that when fraud occurs, particularly forensic accountant who served in the public sector requires the combination of skills that are considered relevant enough to help its performance in uncovering fraud happens.

Based on the result in Table 2, P-value of investigative skill is 0.009. P-value is smaller than the level of significant (α = 1% or 0.009 < 0.01). It means that H1 is supported, in which the investigative skill affected positively and significantly on the skills of forensic accountants. The data analysis result is in line with the research conducted by Grippo and Ibex (2003), who stated that the action of an investigation by forensic accountants aimed to reveal fraud acted by the suspects. In other words, the possession of a high investigative skill will ease them to reveal the fraud. Similar to Prabowo (2013) who elaborated that a forensic accountant must understand the fraud investigation process such as fraud detection, evidence, investigation methods, and investigation report. From the result of the test, hypothesis 2 affects positively. It is concluded that a forensic accountant possessing investigative skills will have a bigger chance to reveal fraud.

Furthermore, the P-value of a t-test of business valuation skills is 0.047. P-value is smaller than the significant (α = 5% or 0.047 < 0.05). It means that H3 is supported, in which the business valuation skill affected positively and significantly on the skills of forensic accountants. From the test of H3, it is found that the business valuation skill affected positively on the skills of a forensic accountant to revealing fraud. It leads to an implication that a forensic accountant possessing business valuation skills would affect the possessed skills significantly in revealing fraud. It is in line with the research by Fenton and Edmund (2011) which stated that the ability to assess a business for the forensic accountant will greatly assist performance in uncovering fraud occurring in a business unit, due to several losses from acts of fraud that can be estimated based on the value of capitalization owned by the organization.

On the other hand, it is gained that the P-value of a t-test of business skills is 0.082. P-value is smaller than the significant (α = 10% or 0.082 > 0.1). It means that H4 is supported. In other words, business skills had a significant effect on the skills of a

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

forensic accountant in revealing fraud. However, the result of H4 test figures out the business skill has an effect on the skills of forensic accountants in revealing fraud. According to Table 2, business skills have negative impac on Skills of Forensic Accountant in revealing fraud. Hence, when a forensic accountant has high business skills, the ability to uncover fraud cases decreased. It can be said that when a forensic accountant has a high business skill is then it did not necessarily affect the forensic accountant to be able to expose cases of fraud, more like what is proposed Kranacher et al. (2008) that the relationship between the skill to understand the business cycle owned by an accountant forensics to uncover cases of fraud are handled. This is due to the few cases involving corporate fraud are handled directly by the forensic accountants in the Audit Board of the Republik of Indonesia representative Yogyakarta.

Conclusion

Based on the result of the hypotheses tests, there are three independent variables that had a significant effect on the skills of a forensic accountant. Investigative skill and business valuation skills are proven to affect positively on the skills of forensic accountants in revealing fraud, and then business skills had a negative effect on the skills of forensic accountants in revealing fraud. However, financial accounting skills had no significant effect on the skills of forensic accountants in revealing fraud in the public sectors. From the empirical test, it is implied that the finding can be used as the basis of institutions' concerns such as recruiting future forensic accountants in the public sectors, and training and upgrading related to the investigative skill and business valuation which is compulsorily possessed by forensic accountants. By doing so, the quality and the skills of forensic accountants as fraud examiners can be improved to ease them revealing fraud, especially in the public sectors.

This research has some limitations. First, the number of respondents is limited to be taken from the public sectors in the Indonesian Supreme Audit Institution of the Republic of Indonesia in Yogyakarta and some public sectors in Yogyakarta. Second, there is also the possibility of bias and dishonest answers on the questionnaires. In short, the data in this research are only concerned with the perception of the respondents' answers.

Finally, for future studies, it should be able to enlarge the number of the research sample from distinctive types of forensic accountants in some institutions such as the Indonesian Supreme Audit Institution, the Finance and Development Auditor, the Corruption Eradication Commission, the police and the attorney. Then, so that the results obtained are more in-depth, future studies can also develop studies with qualitative methods.

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

References

- Akers, M. D., & Porter, G. L. (2003). Your EQ Skills: Got What It Takes? Journal of Accountancy, 195, 65–70.
- Alatas, S. H. (1986). Sociology of Corruption A Data Browsing with Contemporary. Jakarta: LP3ES.
- Albrecht, W. S., Albrecht, C. C., Albrecht, C. O., & Zimbelman, M. (2012). Fraud Examination (4th ed.). Mason, USA: South-Western Cengage Learning.
- Arens, A. A., Elder, R. J., & Beasley, M. S. (2008). Auditing and Assurance Services: an Integrated Approach. Singapore: Pearson Education, Inc.
- Association of Certified Fraud Examiners. (2012). Report to The Nations on Occupational and Abuse. Retrieved from: www.acfe.com/uploadedFiles/ACFE Website/Content/rttn/2012-report-tonations.pdf
- Bay, D., & McKeage, K. (2006). Emotional Intelligence in Undergraduate Accounting Students: Preliminary Assessment. Accounting Education: An International Journal, 15(4), 439–454. https://doi.org/10.1080/09639280601011131
- Bayley, D. H. (1988). Consequences of Corruption in Developing Nations. In M. Lubis & J. C. Scott (Eds.), Anthology Corruption (pp. 83-114). Jakarta: LP3ES.
- Black's Law Dictionary. (2009). Black's Law Dictionary. 9th ed (B. A. Garner, Ed.). West Publishing CO.
- Bonner, S. E., & Lewis, B. L. (1990). Determinants of Auditor Expertise. Journal of Accounting Research, 28, 1–20. https://doi.org/10.2307/2491243
- Brooks, R. C., Riley, R. A., & Thomas, J. (2005). Detecting and Preventing the Financing of Terrorist Activities: A Role for Government Accountants. The Journal of Government Financial Management, 54(1), 12–18.
- Cohen, M., Crain, M., & Sanders, A. (1996). Skills Used in Litigation Services. Journal of Accountancy, 182(3), 101–101.
- Cooper, D. R., & Schindler, P. S. (2011). Business Research Methods. New York: McGraw-Hill, Inc.
- Cressey, D. R. (1953). Other people's money: a study of the social psychology of embezzlement. New York: Free press.
- Cwati, S. T. (2004). Comparing Anti-Corruption Strategies in South Africa's Western and Eastern Cape Provinces. A Research Report Submitted to the School of Government, University of the Western Cape.
- Damania, R., Frediksson, P. G., & Mani, M. (2003). The Persistence of Corruption and Regulatory Compliance: Theory and Evidence. IMF Working Paper, WP/03/172, (September 2003).
- Davis, C., Farrell, R., & Ogilby, S. (2010). Characteristics and Skills of the Forensic Accountant. American Institute of Certified Public Accountants. Retrieved from: http://www.aicpa.org/interestareas/forensicandvaluation/resources/practaidsguidanc e/downloadab ledocuments/forensicaccountingresearchwhitepaper.pdf
- De Melo, M., Ofer, G., & Sandler, O. (1995). Pioneers for Profit: St. Petersburg Enterprenuers in Services. World Bank Economic Review, 9, 425-450. https://doi.org/10.1093/wber/9.3.425
- Digabriele, J. A. (2008). An Empirical Investigation of the Relevant Skills of Forensic Accountants. Journal of Education for Business, 83(6), 331–338. https://doi.org/10.3200/joeb.83.6.331-338
- Elitas, C., Karakoc, M., & Gorgulu, M. E. (2011). Stance of Accounting Instructors to Forensic Accountancy Profession: Example of Turkey. International Journal of Business and Social Science, 2(10), 224-241.

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

- Fenton, J., & Edmund, D. (2011). Educating Students for Forensic Accounting Careers. *In Asian Pasific Conference on Internasional Accounting Issues*. Beijing, China.
- Grippo, F. J., & Ibex, J. W. (Ted). (2003). Introduction to forensic accounting. The National Public Accountant, Jun, 4–5.
- Hamdani, R., Kumalahadi, & Urumsah, D. (2017). The Classification of Corruption in Indonesia: A Behavioral Perspective. SHS Web of Conferences, 10002(34). http://doi.org/10.1051/shsconf/20173410002
- Harris, C. K., & Brown, A. M. (2000). The Qualities of a Forensic Accountant. *Pennsylvania CPA Journal*, 71(1), 6–7.
- Hodges, D., & Burchell, N. (2003). Business Graduate Competencies: Employers' Views on Importance and Performance. *Asia-Pacific Journal of Cooperative Education*, 4(2), 16–22.
- Hopwood, W. S., Leitner, J. J., & Young, G. R. (2008). Forensic Accounting. New York: McGraw-Hill Companies, Inc.
- Kahan, S. (2006). Sherlock Holmes enters accounting: Dramatic increase in fraud brings more CPA sleuths into the industry. *Accounting Today*, 20(8), 32–33.
- Kalbers, L. P., & Fogarty, T. J. (1995). Professionalism and its consequences: A study of internal auditors. *Auditing: A Journal of Practice & Theory, 14*(1), 64–86. https://doi.org/10.1108/19355181199500002
- Karni, S. (2000). Auditing: Audit Khusus & Audit Forensik dalam Praktik. Jakarta: Lembaga Penerbit FE UI.
- Krambia-Kapardis, M. (2002). A fraud detection model: A must for auditors. *Journal of Financial Regulation and Compliance Volume*, 10(3), 266–278. https://doi.org/10.1108/13581980210810256
- Kranacher, M.-J., Morris, B. W., Pearson, T. A., & Riley, R. A. (2008). A Model Curriculum for Education in Fraud and Forensic Accounting. *Issues in Accounting Education*, 23(4), 505–519. https://doi.org/10.2308/iace.2008.23.4.505
- MacPhail, A. (2004). The Social construction of higher grade physical education: the impact on teacher curriculum decision making. *Sport, Education and Society, 9*(1), 53–73. https://doi.org/10.1080/1357332042000175818
- Merdeka.com. (2013, May 17). Ahmad fathanah Laughing Sumringah. Retrieved from: http://www.merdeka.com/foto/peristiwa/ahmad-fathanah-tertawa-sumringah.html
- Messmer, M. (2004). Exploring options in forensic accounting. *The National Public Accountant*, Dec/Jan, 19–20.
- Morrow, P. C., & Goetz, J. F. (1988). Professionalism as a form of work commitment. *Journal of Vocational Behavior, 32*(1), 92–111. https://doi.org/10.1016/0001-8791(88)90008-5
- Murtanto, & Gudono. (1999). Identify Characteristics Skills Audit: Public Accounting Profession in Indonesia. *Jurnal Riset Akuntansi Indonesia*, 2(Januari), 37–52.
- Pearson, T. A., & Singleton, T. W. (2008). Fraud and Forensic Accounting in the Digital Environment. *Issues in Accounting Education*, 23(4), 545–559. https://doi.org/10.2308/iace.2008.23.4.545
- Pope, J. (2000). Confronting Corruption: The Elements of a National Integrity System. Berlin: Transparency International (TI).
- Prabowo, H. Y. (2013). Better, Faster, Smarter: Developing a Blueprint for Creating Forensic Accountants. *Journal of Money Laundering Control*, 16(4), 353–378. https://doi.org/10.1108/jmlc-05-2013-0017
- Ramamoorti, S. (2008). The Psychology and Sociology of Fraud: Integrating the Behavioral Sciences Component Into Fraud and Forensic Accounting Curricula. *Issues in Accounting Education*, 23(4), 521–533. https://doi.org/10.2308/iace.2008.23.4.521

Skills of the Forensic Accountants in Public Sector Reveal Fraud in Indonesia

- Ramaswamy, V. (2005). Corporate Governance and the Forensic Accountant. *The CPA Journal*, 75(3), 68–70.
- Rezaee, Z., Crumbley, D. L., & Elmore, R. C. (2004). Forensic Accounting Education: A Survey of Academicians and Practitioners. In B. N. Schwartz & J. E. Ketz (Eds.), Advances in Accounting Education, 6, 193–231.
- Rezaee, Z., Reinstein, A., & Lander, G. H. (1996). Integrating forensic accounting into the accounting curriculum. *Accounting Education*, 1(2), 147–162.
- Salleh, K., & Aziz, R. A. (2014). Traits, skills and ethical values of public sector forensic accountants: an empirical investigation. *Procedia Social and Behavioral Sciences*, 145(2014), 361–370. https://doi.org/10.1016/j.sbspro.2014.06.045
- Tan, H.-T., & Libby, R. (1997). Tacit Managerial versus Technical Knowledge As Determinants of Audit Expertise in the Field. *Journal of Accounting Research*, 35(1), 97–113. https://doi.org/10.2307/2491469
- Tanzi, V. (1998). Corruption around the world: causes, scope, and cures. *IMF Staff Papers*, 45(4), 559–594.
- Transparency International. (2015). Corruption Perceptions Index 2015. Retrieved from http://www.transparency.org/cpi2015
- Tuanakotta, T. M. (2010). Forensic & Investigative Accounting Audit (2nd ed.). Jakarta: Salemba Empat.
- UNODC. (2004). United Nations Convention Against Corruption. Retrieved from:

 http://www.unodc.org/documents/brussels/UN Convention Against Corruption.p

 df
- Viva.co.id. (2013, February 1). Political Career Lutfi Hasan Ishaaq. Retrieved from: http://politik.news.viva.co.id/news/read/386833-perjalanan-karir-politik-luthfi-hasanishaaq
- Wartabuana.com. (2014, September 19). Problem Decision MA, LHI: All Can Be Arranged. Retrieved from Source: http://m.wartabuana.com/read/soal-putusan-ma-lhi--semua-bisadiatur.html
- Webster, L. M. (1993). The Emergence of Private Sector Manufacturing in Hungary. *World Bank Technical Paper 229*. Washington, D.C: World Bank.
- Yabrak, I., & Webster, L. (1995). Small and Medium Enterprises in Lebanon: A Survey. World Bank, Private Sector Development Department and Industry and Energy Division, Middle East and North Africa Country Department II, final report, January 28.