
Forensic Accounting Skills and the Effective Identification in Money Laundering Activities – Transaction Monitoring Perspective

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Abstract: This research examined the relationship between forensic accounting skills and the identification of money laundering activities from the perspective of transaction monitoring. The forensic accounting skills is defined to consist of skills in auditing, investigative and critical thinking. The descriptive statistic indicates that the analysts rank investigative skills as the most important skills. The multiple regression analysis on 134 data collected from the transaction monitoring analysts showed that the investigative and critical thinking skills were medium to highly correlated with the identification of money laundering activities. These findings provide valuable insight and guidance to educators, practitioners, and other related parties that they have to give emphasise on these skills such as by providing training to keep the transaction monitoring analysts of the banking institutions updated with the new developments on investigative skills and enhance on the critical thinking skills for effective identification of money laundering activities.

Keywords: Money laundering, criminal activities, transaction monitoring, forensic accounting skills

INTRODUCTION

Money laundering is a process of converting the money derived from illegal activities usually known as dirty money, to a clean money. The purpose of money laundering is to conceal the illegal activities in which the proceeds are derived. Hence, the seemingly cleaned money can be used by the criminal to buy assets etc. There are a variety of methods that can be used to legalised the dirty money (Mohamed & Ahmad, 2012) and the preferred channel to launder money is through the financial institutions especially the commercial banks due to their products and services which were easily manipulated (Mariappan & Venkatachalapathy, 2015). Thus, the banks have to monitor the customer's financial activities or transactions in order to identify money laundering activities especially in placement and layering stages of money laundering (Chaikin, 2009). The transaction monitoring is currently carried out through automated system or application that helps to filter the transactions with support of human expertise to review and analyze anomalies in the transactions.

Even though the banking institutions were equipped with automated risk management solutions, the manual and human expertise are still essential in assessing money laundering risks (Mat Isa et. al, 2015). Consequently, the forensic accounting has received much attention and have been a frequently used tool in investigation and finding evidence in financial, commercial crime and money laundering activities. The forensic accounting is the application of accounting concepts and techniques to legal problems. It demanded reporting when then accountability of the fraud has been established and the report is considered as evidence in the court of law (Dhar & Sekar, 2010). Therefore, the objective of this research is to determine the types of the forensic accounting skills that can effectively identify money laundering activities.

MONEY LAUNDERING

The term "money laundering" has been used for the first time in year 1920 by the authorities in the United States of America. It refers to activities of criminals using self-services laundries as a method to legalise the large amount of "dirty" money they accumulated from illegal activities like smuggling, gambling and prostitution (Stessens, 2000).

There are three stages of money laundering; placement, layering and integration. The first is a placement stage, where illegally derived funds are introduced or placed into the financial systems. After successful placement, the second stage follows in which the dirty money would be layered. Layering is a process where it involved complicated routing or transfers to hide the originality of the illegally derived funds. The purpose of this stage is to avoid funds from being connected back to the criminal or illegal activity. The layering process will puzzle the

law enforcement's task of determining and segregating illegal funds from legal ones. After a multiple layering, which depends on the nature of the illegal funds and when the criminal is confident that the trail has been erased, the funds will be integrated into the financial system again. By this time, the illegal funds appeared as legal funds and will be used for investment, to pay for goods and services such as purchase of property and luxury items (Cassella, 2018). Both the legal and illegal funds are mixed and are not distinguishable (Zul Kepli and Nasir, 2016).

FORENSIC ACCOUNTING

Forensic accounting has experienced substantial growth, becoming an important tool in detection, prevention and alleviation of economic crimes (Ogotu and Ngahu, 2016). A research by Ebere and Ibanichuka (2016) examined money laundering and forensic accounting skills in Nigeria banks and found that those involved in forensic accounting practice have a good accounting qualification, sufficient skills in forensic accounting, and all the dimensions of money laundering methods correlated significantly with the accounting skills.

There are several studies that have been conducted to identify the salient forensic accounting skills. The research carried out by Davis, Farell and Ogilby (2010) for AICPA observed that the CPA or profession accountant rank critical or strategic thinking as first important skills. Then it follows with the effective writing skills, effective oral communication, investigative ability and investigative intuitiveness. Bhasin (2013) from India identified the top 5 forensic accounting skills and these are the auditing skills, critical or strategic thinking, effective oral communication, effective written communication and the ability to identify key issues. Salleh and Ab Aziz (2014) carried out a study in Malaysia and identified 5 basic skills for forensic accountants in public sector. These are the investigative ability, auditing skills, critical or strategic thinking, the ability to identify key issues and to understand the goal of the case. A study by Ogotu and Ngahu (2016) in Kenya recognized 4 skills deemed important to forensic accounting which are the auditing skills, investigative skills, legal skills and fraud skills. Meanwhile, financial investigations issues was also importance to be reveal as public accounting information as it was reflect to the shareholders interest in the capital market activities, (Dakhlallah et al. 2020).

Based on the above research, the objective of the current study is to determine the salient forensic accounting skills among the auditing skills, investigative skills, and critical or strategic thinking skills. The study also examined whether these skills are effective in identifying money laundering activities from the perspective of money laundering transaction monitoring.

HYPOTHESES DEVELOPMENT

Auditing Skill

Auditing skill is described by Prabowo (2016) as ability to examine and verify the company's accounts, transactions, physical inspection and other related documents. This skill helps the anti-money laundering analyst in transactions and documentation inspection which is essential in money laundering identification.

Therefore, hypothesis H1 was proposed as follows:

H1: There is a relationship between auditing skill and identification of money laundering activities.

Investigative Skill

An investigative skill is the ability to own highly inquisitive approach and willing to investigate opinions and/or facts that may suggest fraud (Davis, Farell and Ogilby, 2010; Bhasin, 2013). Furthermore, the financial investigation was also importance to corporate tax reporting activities as it will lead to understanding among of shareholders in the capital market activities, (Rashid et al. 2015). was In other words, investigative skill is the ability to examine or analyse fact or information which is also essential for money laundering identification in examining all available sources for the purposes of the in money laundering identification.

Therefore, hypothesis H2 was proposed as follows:

H2: There is a relationship between investigative skill and money laundering identification.

Critical Thinking Skill

Critical or strategic thinking skills is defined as ability to think the whole picture conceptually, imaginatively, systematically and opportunistically to spot and understand the information in order to solve a problem (Prabowo, 2016). De Bono (1996) highlighted that without creativity, individuals will unable to make full use of the information and experience that was already available.

Therefore, hypothesis H3 was proposed as follows:

H3: There is a relationship between critical thinking skill and money laundering identification.

RESEARCH METHODOLOGY

Primary data were obtained from the questionnaires distributed to the transaction monitoring unit or anti money laundering (AML) analysts of the commercial banks in Kuala Lumpur, Malaysia. The transaction monitoring unit is an independent department under Risk and Compliance Division. Out of 150 questionnaires that were distributed, 134 completed responses were received at 89.3% response rate. The data were then analysed using

Pearson correlation analysis and multiple regression analysis to establish the relationships between forensic accounting skills and the effective identification of money laundering activities.

RESULT ANALYSIS

The data were first analysed for validity, reliability and normality and the results indicate there is no violations on the validity and reliability, and the normality of the data are acceptable. The descriptive statistics as in Table 1 showed the respondents ranked the investigation skill as first, followed by the auditing skills and then the critical thinking skills.

Table 1: The Rank of the Forensic Accounting Skills

Skills	Frequency	Percentage	Rank
Investigative Skills	60	50.70%	1
Auditing Skills	59	44%	2
Critical Thinking Skills	53	39.60%	3

The bi variate Pearson correlations were carried out on each of the forensic accounting skills and the effective identification of the money laundering activities. A bivariate correlation was used in this study rather than partial correlation because it is useful for two variables that are not normally distributed, ordinal data and relatively robust to outliers. The summarised results from the Pearson correlations are tabulated in Table 2. The results showed that all the independent variables are significantly correlated with the effective identification of money laundering activities and all are significant at 0.01. The findings also showed that the greatest and significant relationship is between investigative skills and effective identification of money laundering activities where $r = 0.807$ ($p = 0.000$).

Table 2: Pearson Correlation between Forensic Accounting Skills and Effective Identification of Money Laundering Activity

Forensic accounting skills	Sig. (2-tailed)	Beta Coefficient
Investigative Skills	0.000	0.807
Auditing Skills	0.000	0.698
Critical Thinking Skills	0.000	0.745

Dependent variable: Effective Identification of Money Laundering Activities N=134

The data are then analysed using multiple regression analysis to determine the forensic accounting skills that have influence on identification of money laundering activities. The results are shown in Table 3. The table showed that the investigative skills has the largest influence on the effective identification of money laundering activities with $\beta = 0.561$ ($p = 0.000$), followed by the critical thinking skills with $\beta = 0.251$ ($p = 0.004$ which < 0.05). However, the auditing skills is not significant ($p = 0.190$ which > 0.05). Overall, the model is significant ($p = 0.000$), r and r squared are 0.757 and 0.573 respectively.

Table 3: Multiple Regression

Model	Unstandardized coefficients	Standardized Coefficients	t	Sig.
	Beta	Beta		
(Constant)	7.87217	0.049	0	1
Auditing Skills	0.11	0.084	0.318	0.19
Critical Thinking Skills	0.251	0.085	2.955	.004
Investigative Skills	0.516	0.102	5.036	.000

Coefficients^a

Dependent Variable: Effective Identification of Money Laundering Activities

To better understand how these significant skills were influencing the effectiveness of the money laundering activities identification, the Pearson correlation analyses were carried out on the investigative skill items and critical skill items. These items were regressed against the effective identification of money laundering activities. The results for the investigative skill items showed that the items “enhance the understanding of the information gathered for the transaction analysis”, and “enhance the ability of identifying relevant information and decision making as to which information that need to be follow up in more depth” are significant. This indicates that the investigative skills will help enhancing the ability of identifying relevant information and the understanding of the information gathered for the transaction analysis. As for the critical thinking skills the most significant items are “improve the ability in gathering and assessing information to predict and anticipate unusual behaviour in alerted transaction”, followed by “enhance the ability to compile and organize facts and information to comprehend new/unfamiliar information in alerted transaction”. Hence, from this results, the respondents believed

that by having enhanced critical thinking skills will improve the transaction analysis in terms gathering information and understand the information in detecting unusual behaviour in alerted transaction.

DISCUSSION

The findings from the correlation analysis showed that there are positive correlations between all forensic accounting skills and effective identification of money laundering activities. However, multiple regression analysis found that only investigative skills and critical thinking skills have significant correlations with the effective identification of money laundering activities. While the auditing skills has no significant correlation. It is also noted that both analyses found that investigative skills are greatest forensic accounting skills that influence the effective identification of money laundering activities. This is consistent with the descriptive analysis that showed the respondents has ranked investigative skills as the most important skills needed for the effective identification of money laundering activities. The implication of these findings provide an important message to the compliance department of the banking institutions that they have to provide appropriate training especially in the area that could enhance the investigative and critical thinking skills to the transaction monitoring analysts.

With respect to the auditing skills, the correlation analysis indicates the auditing skills has a significant correlation with the effective identification of money laundering activities but the level of correlation is moderate. The regression analysis showed it did not have any influence in effective identification of money laundering activities. Although it does not have any influence, it does mean that the auditing skills is less important not needed. The respondents of this research are mainly transaction monitoring unit analyst and only small percentage of the respondent has accounting and auditing background. Thus, this may cause different understanding or perception towards the skills as compared to the respondents with accounting background since they have more exposure with the terms and also have more knowledge on what the auditing skills are for.

This is also perhaps due to the items that measured the auditing skills are not familiar to the respondents due to the nature of the transaction monitoring work. This is supported by prior research done by Davis, Farrell and Ogilby (2010) under AICPA, it has stated that different perception on the skills maybe due to working environment or exposure. The research by Davis, Farrell and Ogilby (2010) is on perception of attorney, academician and CPA towards the important skills and traits of forensic accountant. The results from their study showed that the three focus groups have different perceptions on the most important skills. They found that the academician has ranked auditing skills as the most important skills for forensic accountant but for attorney, auditing skills has been ranked it the fifth most important skills forensic accountant. Shockingly, auditing skills is not even in Top 5 ranking for CPA. This is also supported by Salleh and Ab Aziz (2014) that the different background characteristics and functional areas of the three groups are expected to be the reasons for their different ratings for the auditing skills issue. Other than that, the insignificant result may due to the respondents' perception that the other two skills, critical thinking skills and investigative skills are most suitable for their nature of work. Unlike auditing process, transaction monitoring require analysis from information obtained from various resources and not only from one on financial related document such as financial statement. Hence, that could may contribute to low scores given by respondents for auditing skills. Nevertheless, the perception of respondents with no accounting background on forensic accounting skills that relate to auditing skills are still considered valid, as the auditing skills definition and explanation are provided in the questionnaires.

LIMITATION

Several limitations in conducting this research. Firstly, this research only focused on one group of respondents. As identification of money laundering involves lots of level and parties such as front line staff, compliance and financial intelligent unit, focusing on one group of respondent may not be sufficient to comprehend the relationship between dependent variables and independent variables. The second limitation of the study is the lack of accessibility to other levels and parties that could be considered as potential respondents. Hence, in future, it is hope that the research will be conducted on larger sample size involving all related stakeholders such as front line officer, compliance and financial intelligent unit as respondents.

Other limitation for this study was low or close to non-prior research specifically tested the relation between forensic accounting skills and the effective identification of money laundering activities in perspective of transaction monitoring. The prior studies were conceptual or qualitative instead of quantitative studies. In addition, a lot of prior researches in this study area were done in foreign countries and some were written in their native languages which required a translation using online translator like Google Translate. Using the translator may cause misleading fact or inaccurate data the as some words can be inaccurately translated. Other than that, researches were conducted on European countries that have different culture, economic environment and also perception compared with Malaysia. Therefore, it was not suitable to make comparison or apply their approach due to the fact that they maybe have different resources and accessibility compared to Malaysia. Hence, it is suggested that related bodies or individual research in Malaysia to have interest and conduct further research in this field.

CONCLUSION

In a nutshell, it perceives that some skills of forensic accountants have positive relation with the effectiveness identification of money laundering activities. This is synchronized with prior research that profession background will have influence in perception of the respective skills. The findings of this research can be a guidance to management in deciding the types of training for forensic accounting analysts to improve their skills. Kemal (2014) cited that training was an effective coaching and mentoring process with objectives to change the employee's attitude, skills, knowledge and behaviour. Hence, this study will help the financial institutions to focus on the types of training to provide to the staff that can help improving their effectiveness level of investigating money laundering. In other words, the corporate governance mechanism was also claimed as an important policies need to be maintained by the companies in order to protect the interest of shareholder with the business organization, (Mustapha et al. 2020). It would also help the related bodies at the initial stage of hiring new employees, as they will be better informed about skills needed as a competent candidate. This can be achieved by developing an assessment that will help employer to identify whether or not the candidates have appropriate skills before hiring.

Findings of this research may also be a revelation for the forensic accountants to expand their area of expertise and add more value to their careers path. As mention earlier, prior research often highlighted that forensic accounting can only be appropriate as expert witness in court and also in fraud investigation. Hence, this research has shown that the forensic accounting skills were appropriate in money laundering investigation specifically at the stage of transaction monitoring.

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APPENDICES

Appendix 1

Table 1: Coefficient Correlations (Investigative Skills)

Coefficient Correlations								
	Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	6.923	0.44		-15.738	0	-7.793	-6.052
	1) find strong evidence to support the transactions analysis.	0.129	0.083	0.116	1.547	0.124	-0.036	0.294
	2) enhance the quality of intelligence and evidence gathered for transaction analysis.	0.198	0.105	0.159	1.889	0.061	-0.009	0.405
	3) enhance the understanding of the information gathered for the transaction analysis.	0.332	0.085	0.31	3.889	0	0.163	0.501
	4) improve fact finding and identifying red flags while performing transaction analysis.	0.09	0.083	0.084	1.092	0.277	-0.073	0.254
	5) enhance the ability of identifying relevant information and decision making as to which information that need to be follow up in more depth.	0.356	0.089	0.303	4.022	0	0.181	0.531

a. Dependent Variable: Effective Identification of Money Laundering Activities

Appendix 2

Table 2: Coefficient Correlations (Critical Thinking Skills)

Coefficient Correlations								
	Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-6.803	0.538		-12.655	0	-7.867	-5.74
	1) established a strong and comprehensive transaction analysis foundation.	0.101	0.105	0.079	0.967	0.335	-0.106	0.309
	2) enhance proficiency and competency with the relevant information gathered for transaction analysis.	0.308	0.118	0.24	2.604	0.01	0.074	0.542
	3) improve the ability in gathering and assessing information to predict and anticipate unusual	0.261	0.091	0.236	2.872	0.005	0.081	0.441

	behaviour in alerted transaction.							
	4) enhance the ability to compile and organize facts and information to comprehend new/unfamiliar information in alerted transaction.	0.347	0.11	0.275	3.147	0.002	0.129	0.565
	5) improve the ability to read critically information available and write credibly all the appropriate information in the transaction analysis.	0.075	0.084	0.07	0.902	0.369	-0.09	0.241

a. Dependent Variable: Effective Identification of Money Laundering Activities

Appendix 3

Table 3: Model Summary of Multiple Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change in R Square	F	Sig. F	Durbin-Watson
1	.757 ^a	.573	.563	.66373485	.573	57.593	.000	1.836

a. Predictors: (Constant), Auditing Skills, Investigative Skills, Critical Thinking Skills

b. Dependent Variable: Effective Identification of Money Laundering Activities