The Effect of Trade Based Money Laundering on the Risk Assessment of Banking Sector in Malaysia

By Zetty Yusnita Binti Abdul Jalil



Project Paper Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Business Administration Universiti Tun Abdul Razak **DECLARATION**

The author hereby declares that this project paper is the original study undertaken by her

unless stated otherwise. The acknowledgement has been given to references quoted in the list

of references. The views and analysis in this study are that of author's, based on the

references made, and this does not constitute an invitation to use this study as a technical tool

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ii

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TABLE OF CONTENTS

DEC	CLARATION	ii
ACK	KNOWLEDGEMENT	iii
LIST	Γ OF TABLES	vi
LIST	Γ OF FIGURES	vii
ABS	STRACT	viii
СНА	APTER 1: INTRODUCTION	
1.1	Background of the Study	1
	1.1.1 What is Trade Based Money Laundering	2
	1.1.2 The Financial Action Task Force (FATF)	4
	1.1.3 The AMLA	
	1.1.4 Banking Services and TBML	7
	1.1.5 What is Trade Based Money Laundering Risk Assessment	8
1.2	Problem Statement	9
1.3	Research Objectives	
1.4	Research Questions	
1.5	Significance of the Study	14
1.6	The Organisation of the Study	15
	APTER 2: LITERATURE REVIEW	
CHA	APTER 2: LITERATURE REVIEW	
2.1 Iı	APTER 2: LITERATURE REVIEW Introduction Cheoretical Foundation Empirical Research Proposed Conceptual Framework Hypothesis Development	16
2.2 T	Theoretical Foundation	18
2.3 E	Empirical Research	21
2.4 P	Proposed Conceptual Framework	23
2.5 H	Hypothesis Development	24
2.6 S	Summary of Chapter 2	25
СНА	APTER 3: RESEARCH METHODOLOGY	
3.1 Iı	ntroduction	27
	Research Design	
3.3 S	Study Population and Sampling Procedures	28
	Data Collection Method	
	Operationalisation and Measurement	
	3.5.1 Independent Variables	33
	3.5.2 Mediating Variables	34
	3.5.3 Dependant Variables	34
3.6 D	Data Analysis Techniques	34
	3.6.1 Descriptive Analysis Techniques	35
	3.6.2 Inferential Analysis Techniques	35
37S	Summary of Chanter 3	36

CHAPTER 4: RESULTS & DISCUSSION	
4.1 Introduction.	37
4.2 Respondent Profile	37
4.3 Descriptive Statistic	57
4.4 Tests of Normality	60
4.5 Correlation Analysis.	62
4.6 Multiple Regression Analysis.	
4.7 Discussion.	66
CHAPTER 5: CONCLUSION	
5.1 Recap of the Study	67
5.2 Implication of the Study	67
5.3 Limitation of the Study	
5.4 Recommendation for Future Research.	
5.5 Conclusion.	70
REFERENCES	71
APPENDICES Copying, modifying, or reprinting, is not permitted.	

LIST OF TABLES

Table 1.2 Companies Charged Under AMLA
Table 2.5 Research Hypothesis
Table 3.5 Types of Measurement Scales
Table 4.3 Descriptive Statistic 59
Table 4.4 Tests of Normality
Table 4.5 Correlation between Inexperience Front Officer with the Competencies of the
Front Officer62
Table 4.5(i) Correlation between the IT Capable Infrastructure and the Investment in
Trade Compare Prices Software
Table 4.5(ii) Correlation between the Relationships of the Link with Internal Audit
and the Effectiveness of the Compliance Department63
Table 4.5(iii) Correlation between the Relationships with Strong Knowledge at
International Level and the Efficiency of the Regulatory Requirement 63
Table 4.6 Model Summary64
Table 4.6 (i) Anova

LIST OF FIGURES

Figure 1.1.2 Members of the FATF	5
Figure 1.1.3 How Criminals Launder Money	6
Figure 2.4 Proposed Conceptual Frameworks	23
Figure 3.2 Processes in the Research Design	28
Figure 4.2 Gender	. 38
Figure 4.2(i) Age	.38
Figure 4.2(ii) Educational Qualification	. 38
Figure 4.2(iii) Impediments to Trade Based Money Laundering Detection	40
Figure 4.2(iv) How Aware is Senior Management about TBML within your	
Organization	42
Figure 4.2(v) Define the Nature of the Relationship between Internal Audit and TBML	
Compliance within your Organization	. 44
Figure 4.2(vi) Is TBML Compliance Firmly Embedded in your Organization	46
Figure 4.2(vii) Improvement That Are needed	.48
Figure 4.2(viii) Competencies of Frontline Officers	. 50
Figure 4.2(viii) Competencies of Frontline Officers	52
Figure 4.2(x) The Efficiency of the Regulatory Requirement	. 54
Figure 4.2(xi) The Efficiency of the Regulatory Requirement	56

Abstract of the project paper submitted to the Senate of Universiti Tun Abdul Razak in partial fulfilment of the requirements for the Master of Business Administration

The Effect of Trade Based Money Laundering on the Risk Assessment of Banking Sector in Malaysia

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This paper aims to explore in depth some of the effect of trade-based money laundering on the risk hazards of the banking institution in Malaysia. Banking institution is the frontline of defence responsible to undertake money laundering risk assessment. Due to the susceptibility of the banking sector and their vulnerability to money laundering, adequate money laundering risk assessment is an essential. The frontline staff of the banking institution are the one liable to initiate the risk assessment of money laundering through banking activities such as personal or company's accounts opening, deposits, remittances and withdrawal. Increased use to trade based money laundering means there's large amount of cash acquired from the illegal activities. These proceeds then are being transform into legitimize available funds. Unlike other financial crime, trade based money laundering occurs outside of the banking system. The financial sector only becomes involve after the activity has been done. This research tends to identify the risk assessments faced by the executives in the financial institution and recognize the loopholes in the available system used. The database were accumulate through surveys and also by interviewing the banking officers who are involved in the risk assessment of the trade base money laundering and in several financial institutions in Malaysia. Several interviews were done with the person in-charge of the risk assessment and also with the person who not only supervise the regulation but also examine the information gathered pertaining to the risk of money laundering in the Malaysian financial system. Banking institution are under intense worried to handle client's account effectively as there are regulations to do a comprehensive checks on the accounts transaction. Support by the compliance department is essential for the frontline officers and monitoring by the regulatory authority will enhance the intensity in the banking institutions.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

In order to investigate the up and coming risk factor, this research will focus on the implication of trade based money laundering in developing risk assessment to the banking sector. The topic was chosen after reading articles on money laundering and financial crime around the globe. Trade based money laundering is a serious crime. Limited studies have been found regarding the effect of trade based money laundering on the hazards and risk factor of the banking sector.

The purpose of this study is to focus on the observation and tracking of proceeds received through illegal trade transaction. The monies that enter into the financial system can be notice if the Anti Money Laundering (AML) regulation is being implemented. However, most financial institutions struggle to expand the AML system in their organisation. Failing to implement the international standard regulation will create problem to the banking institution. The main purpose of this study is to know what is the banking institution capacity in undertaking the risk assessment of the Trade based money laundering. The system that are developed to detect trade based money laundering need to work side by side to enhance the Anti Money Laundering current system for other techniques of money laundering.

The biggest market for illegal cash comes from drug trafficking which consists 20 % of the crime illegal money (UNODC, 2011) which represent the similarity to 0.6 % global Gross Domestic Product. It was reported by the United Nation that the cocaine market itself is approximately to be worth \$88 billion (Simser, 2012).

Most of the current readings focused on the laundering schemes that involve cash and other conventional ways of transferring illegal money to the banks. Currently there are newer and more complicated laundering scheme globally via the shipping sector. There are few research material that examine how Trade Based Money Laundering can be

notice within the banking institution. This study will focus on addressing current TBML issues and information collected from surveys and interviews from players that is familiar with the trade base money laundering crime activity.

1.1.1What is Trade Based Money Laundering

Trade based money laundering is a process where the illegal proceeds of the crimes being 'legitimized' through the use of trade transactions. It involves mainly the import and export of goods and the exploitation of a variety of cross-border trade finance instruments. (Advantage, 2020). Illegal money is not always represented by cash, cheques or wire transfer but the value of trade goods can also represent the value of illegal funds. Trade based money laundering has been a part of the system since the 1960's (Mauro, 2014). Only in recent years that TBML has become more noticeable especially on the risk assessment of the banking sector. However The Economist called trade "the weakest link" in the fight against money laundering due to the most part of money laundering via trade was being ignored.

Criminals nowadays can exploit the banking system in order to 'clean' the gains from their illegal trade by submitting untrue documentation during shipping.

Although TBML includes the term 'money laundering' which implies cash transactions of some kind, in reality it focuses almost exclusively on the falsified use of documents and shipping information to transfer goods and services (AUSTRAC, 2013)

The most common method of trade based money laundering are:

- Over-invoicing: It is where the exporter submits an inflated invoice to the importer, in order to generate payment that is more than the value of the shipped goods. The excess value is then transferred to the exporter.
- Under-invoicing: it is where the exporter submits a deflated invoice to the importer, shipping the goods which are of greater value and transferring that excess value to the importer.

- Multiple-invoicing: It is where the invoices for the same shipment was charged
 multiple times and then transferring the excess value from the importer to the
 exporter.
- Over or under shipment: It is where the exporter ships more goods than the
 agreed amount to the importer and then transferring the excess value to the
 importer. In other words the exporter ships lesser goods than agreed, transferring
 greater value to the exporter.
- Misrepresentation of quality: It is where the goods shipped to importers are being misrepresented on the official documentation as being of a higher quality and then transfer the excess value to the exporter.

(Advantage, 2020)

Trade mis-invoicing is the largest component of illegal financial outflows measured by GFI (Global Financial Integrity) where their research showed that in 2017 the trade mis-invoicing data from developing countries concluded a record of \$ 817.6 billion. (Trade Related Illicit Financial Flows in developing countries).

It also shows that the developing countries lost \$ 8.7 trillion in illegal financial flows from year 2008 to 2017.

In order to prevent trade based money laundering, firms should strengthen their anti-money laundering controls in trade finance and banking sector. However due to the complexity of these sectors, many firms struggle to control their anti-money laundering programs effectively. Therefore to overcome these difficulties, firms should coordinate with other organisations, government authorities and other law enforcement agencies.

1.1.2 The Financial Action Task Force (FATF)

FATF is an organisation that was established in Paris during the G7 submit in 1989 due to the increase problem occurred regarding money laundering. It is an inter-governmental body which comprised from each of the 34 members countries. The task force was charged with studying money laundering trends, monitoring legislative, financial and law enforcement activities taken at the national and international level, reporting on compliance, and issuing recommendations and standards to combat money laundering. (Wikepedia)

In their first year of operation, a report was issued which includes the recommendations to effectively fight money laundering. They were 40 standards. However in 2003 these standards were revised which involve the techniques and patterns in money laundering. FATF decided to expand their mandate in 2001 due to the terrorist attack on the September 11. (Wikepedia)

More than 200 countries have agreed to implement the FATF standards. The FATF standards and recommendations have been developed in order to coordinate the international response towards the organised crime, terrorism and corruption. Their main duty is to help the authorities to chase after the proceeds of the illegal activity such as drugs, human trafficking and funding for the weapons of mass destruction. (FATF, n.d.)

The FATF monitors countries around the globe to ensure they implement the FATF Standards fully and effectively, and holds countries to account that do not comply to the standards. Malaysia is a member of the Asia/Pacific Group on Money Laundering (APG) which is FATF-style regional body.

The increased concern of the impact that money laundering and financing by the terrorist has led to the global communities to put more efforts to ensure the FATF recommendations be complied. They focus more on disclosing information and being transparent in the financial transactions. (FATF, n.d.)

The FATF has declared that there are three methods of hiding illegal proceeds by way of introducing them formally into the world economy. The methods are by using the financial institutions, secondly is by smuggling cash from one country to another and lastly by trading goods.



Figure 1.1.2 Members of the FATF

In realising the catastrophic effect of money laundering towards the Malaysian economy, the government has taken the necessary measures and they are making considerable progress in fighting this issue.

1.1.3 The Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 (AMLA)

The AMLA Act 2001 is the body that governs the Anti Money Laundering (AML) and Counter Financing of Terrorism (CFT) regime in Malaysia. It was gazetted on the 5th of July 2001 and came into force on 15 January 2002. (Malaysia., 2021)

The AMLA provides wide range of investigations including the law enforcement to freeze and seize properties that are involved or suspected to be involved in money laundering or terrorism financing offences. (Malaysia., 2021) In order words, courts can forfeit properties/proceeds from this serious crime.

Under Section 4 of the AMLA, any person who commits a money laundering offence and shall on conviction be liable to imprisonment for a term not exceeding 15 years and shall also be liable to a fine of not less than 5 times the sum of value of the proceeds of an unlawful activity or instrumentalities of an offence at the time of the offence was committed or five million ringgit whichever is the higher. (AMLA, 2001)

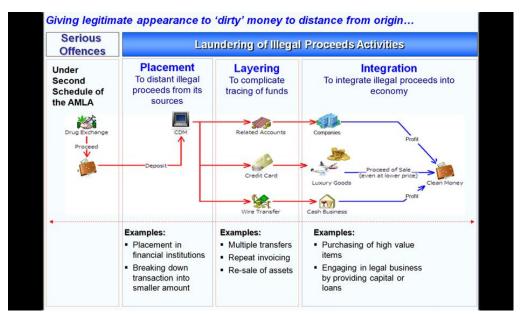


Figure 1.1.3 How criminals launder money

The various part of the AMLA:

Part I: Preliminary

Part II: Money Laundering Offences

Part III: Financial Intelligence

Part IV: Reporting Obligations

Part IVA: Cross border movements of cash and Bearer Negotiable Instruments is not permitted

Part V: Investigation

Part VI: Freezing, seizure and forfeiture

Part VIA: Suppression of Terrorism Financing Offences and Freezing .Seizure and Forfeiture of Terrorist Property.

Part VII: Miscellaneous.

(AMLA, 2001)

Roles of Bank Negara Malaysia as the Competent Authority under the AMLA

As the Competent Authority, Bank Negara Malaysia's roles include the following:

- To receive suspicious transaction reports (STR) from the reporting organisations
- To receive the cash threshold reports (CTR) from relevant reporting organisations
- To analyse the STRs and CTRs.

- To disseminate information on suspected offences derived from the STRs and CTRs analysis to the appropriate law enforcement agencies for investigation.
- To compile statistics and records
- To give instructions to reporting institutions pertaining to any report or information received.
- To make recommendations to the relevant supervisory authority, enforcement agency and reporting institutions arising from any report or information received; and
- To create training requirements and provide training for any reporting institutions in respect of the reporting institutions' obligations under Part IV of the AMLA (AMLA, 2001)

The AMLA is being imposed by various agencies depending on the nature of the crime Bank Negara Malaysia only has the power to investigate money laundering cases related to laws administered by Bank Negara Malaysia such as:

- Financial Services Act 2013
- Islamic Financial Services Act 2013
- Money Services Business Act 2011
- Development Financial Institution Act 2002 (Act 6008) .itu. Printing, is not permitted.

(AMLA, 2001)

1.1.4 Banking Services and TBML

This study will provide information on the several ways that money laundering can exploit the banking sector. In portraying the TBML patterns, a comprehensive collection of the buyers and sellers' database together with the methods of transporting the goods are required before the precise picture of the illegal trade can be properly accepted (Kar, 2012). There are a few factors that can detect the red flags alerts including in the owner of the business or the bank account holder's information. Below are some of the TBML crimes that have been made in order to avoid the authority.:

> i. Hijacking customers account To avoid being detected, the criminals will hijack other customers account and create transaction that will match the customer's current legal transaction.

ii. Enterprise of Letters Of Credit

The only way banks ease trade transaction is by issuing letters of credit. It's a guarantee letter by the bank for the buyer to the seller. It's a powerful mechanism for trading globally. Because banks are not required to question the suspicious transaction, it is open for abuse by TBML criminals and their networks.

TBML usually occurs outside of the banking sector however after the illegal activity has acquired the proceeds and in order to legitimize it that the banking institutions become involve. TBML is a complex issue that affect the financial institution. It can only be detected through the implementation of the AML regulation.

1.1.5 What is trade based money laundering risk assessment?

Trade based money laundering risk assessment is an analytical process in order to measure the probability of the trade business whether it engage to money laundering or terrorism. It is being done by identifying the aspect of the business in attracting money launderers or organizations that is interested in financing a terrorist act.

Risk assessment forms the basis of risk bank approach. It is a way that will enable banks to understand to which extend they are vulnerable to the money laundering. The risk of banks being caught in the middle of illegal trade transactions has increased especially with the advance in technology particularly with the electronic online payment transfer system. This system has increased the speed of illegal money transfer and it is not easily traced.

A bank risk assessment should not be that complex. It usually depends on the nature and size of the bank's business. For smaller banks which provide a limited range of products, a simple risk assessment might be sufficient. Vice versa for more complex bank's services with more diverse customer base, a more sophisticated process will be required.

1.2 Problem Statement

Malaysia is an upper-middle and open economy that is exposed to the threats of money laundering. With Malaysia's strategic geographic position, the free visa entry policy and a well evolve financial system expand Malaysia's expose to criminal crimes such as drug trafficking, corruption, smuggling, terrorism finance and etc.

From the United Nation (UN) and the International Monetary Fund (IMF) it was reported that Malaysia is among the top countries with high illegal financial outflows which estimated for \$ 33.74 billion (ranked 5th among all countries). (INCSR, 2020) . Malaysia is a hub for moving drugs globally. (INCSR, 2020)

Statistic shows that in August 2019, Bank Negara Malaysia froze 35 bank accounts and seized \$ 1 million in cash and properties from a number of illegal trading operations (INCSR, 2020). In January 2019, BNM reduced its cash threshold reports from US\$12,000 to US\$6,000 and in November 2019, it started to implement a cash transaction limit in order to fight these financial crimes.

Banking institution is the first line of defence in undertaking money laundering risk assessment. They are the most vulnerable sector in the financial segment. Trade based money laundering is a real risk in the banking institution because of the multiple services they provided such as deposits, loans and investments.

Money laundering is an immense risk for the banking institution. Banks are paying hefty fines by failing to assess the money laundering risk. For example the London based HSBC Bank was fined USD\$ 2 billion for unable to detect and stop the Mexican drug traffickers from using its facilities (Mclaughin, 2013) Another example involving Standard Chartered Bank. The institution was fined approximately USD \$340 million by the United States authorities for the allegations of handling illegal transactions for Iranian customers (Mclaughin, 2013) This shows that banks faces the risk of criminal prosecution whether they realised that the funds illegally derived or not. Banks directors normally are not aware that their institution is being used to launder money.

Banks are also liable for their workers action therefore it is necessary for them to apply and enforce the necessary legal requirement in accepting cash deposit and monitor on staff that is likely useful to money launderers (Kehoe, The Threat of Money Laundering, n.d.)

Below are the companies that were charged under AMLATFA 2001 by the Bank Negara Malaysia;

Company's Name	Industry	Amount
		Laundered
JNS S/B	Selling a cloned version of a fuel saving	MYR 180 million
	product	
NTS S/B	Illicit deposit and money laundering activities	MYR 59 million
Gen M S/B	Investment of gold	MYR 5.5 billion

Table 1.2 Companies charged under AMLA

JNS Sdn Bhd was raided in 2007 but was only found guilty seven years later for selling fake products unknown to the investors by utilizing the shariah principle. The directors was convicted under Sec 4(1) of the Anti-Money Laundering and Anti-Terrorism Financing Act (AMLATFA) 2001 which upon conviction carried a maximum fine of MYR 5 million or five years imprisonment or both .They were also convicted under Section 25(1) of the Banking and Financial Institutions Act (BAFIA) 1990 which carries a fine of maximum MYR 10 million or maximum 10 years in jail or both (Zuraidah Mohd Sanusi, 2016)

It is known that the increase number of money laundering activities in Malaysia was due to the gap in the current laws and also because of the lack of awareness on the relevant legal institutions in Malaysia.

Money laundering and terrorism financing are problems faced globally. It will not only threaten the security of a country but also will jeopardise stability and efficiency of the government system. Many researchers believe that money laundering will weaken the financial system of a country.

Trade Based Money Laundering is a complicated issue that will affect the financial institution .TBML activities are not easy to detect by the financial institution due to the involvement of several bank accounts and crossing several jurisdictions. The responses require banks to monitor regularly and to adopt certain approach in order to prevent this criminal activity. Financial sector are the most regularly used instrument and also the first contact point with the money launderer. Without realising the help of financial institutions, criminals move their illegal proceed by transferring accounts, remitting funds and the source of the illegal money will be concealed (Wit, 2007).

Without realising TBML has severe impact on the economy of a country. It will increase the political instability of the county due to the uncontrol illegal activities such as supply of destructive weapon and illegal drug into their community. The removal of money from the already weaken economy of the country could destroy the community infrastructure by diminishing the structural funds of the government. TBML can also destroy the local economy by weakening the legal businesses by providing cheaper goods.

In order to implement and maintain the Anti-Money Laundering rules and regulations the cost implication is quite high. The main challenges for banks is to come up with a system that is not expensive which cater for all type of scenario and can be applied in all departments of the banks in Malaysia.

There are not much previous studies relating to the measures taken by the Malaysian

There are not much previous studies relating to the measures taken by the Malaysian Banking sector in relating to trade based money laundering. Therefore the research is done in order to explore and to understand deeply the issues facing by the banking sector in Malaysia pertaining to the risk assessment of trade based money laundering.

Banking institutions should fully prepared themselves with proper facility in order to identify the money laundering risk through the suspicious trade based money laundering transactions. (Yusarina Mat Isa, 2015)

1.3 Research Objectives

Money laundering using the trade sector has become a normal issue for risk assessment especially in the financial sector in Malaysia. As the financial criminals has expand their illegal activities they are now able to exploit all sections of the banking services in order to 'clean' their proceeds. Normally they will use the document and banking services from their trading and shipment sector.

The main challenges and issues for banks which deals with the trade based money laundering, is that money is often normally transferred into banks by using legitimate businesses to cover up. The criminals then will manipulate the pricing, invoice and shipping arrangement in order to cover up the proceed and change it into legal business transactions (FATF, n.d.). This sophisticated trade based money laundering practices usually require cooperation between several parties that normally involves the criminals, the account holder, and the professional launderer who is familiar or working with the financial sector (Mc Carthy, 2014). All of this factors make trade based money laundering a difficult crime to notice. This will provide stress to the risk assessment of the Malaysian's banking system.

The objective of this research is to explain on the banking methods that were used in detecting trade based money laundering transactions. It also focusses on finding the ways to detect these activities and report it to the local or international authorities—and also to elaborate on the function of the Malaysian financial institution regarding this matter.

The summary of the research objectives are:

- To determine the relationship between the competencies of frontline officers and the TBML risk assessment of the banking sector in Malaysia
- To determine the relationship between the IT infrastructure and the TBML risk assessment of the banking sector in Malaysia
- To determine the relationship between the function of Compliance Department and the TBML risk assessment of the banking sector in Malaysia
- To determine the relationship between the Regulatory Requirements and the TBML risk assessment of the banking sector in Malaysia.

1.4 Research Questions

There is a lot of pressure for the banking sector in Malaysia to implement the international standard in order to combat, detect and prosecute suspicious transactions. Suspicious report can only be detected if the risk assessment system used by the banking sector is able to detect the suspicious behaviour. By establishing the Anti Money Laundering Act 2001 is one of the strategies of the Malaysian government battle against terrorist financing and money laundering.

However, 10 years after the introduction of the Act, there are still a few of the previous studies that have been done in investigating the prevention measures taken by the financial institution in Malaysia (Jamaliah Said et, 2013).

This study focus to investigate the effect of trade-based money laundering of the banking sector's risk assessment in Malaysia. In developing the list of risk assessment the following questions are developed in order to guide the study:

- 1. What is the relationship between the competencies of frontline officers and the TBML risk assessment of the banking sector in Malaysia?
- 2. What is the relationship between the IT infrastructure and the TBML risk assessment of the banking sector in Malaysia?
- 3. What is the relationship between the function of Compliance Department and the TBML risk assessment of the banking sector in Malaysia?
- 4. What is the relationship between the Regulatory Requirements and the TBML risk assessment of the banking sector in Malaysia?

1.5 Significance of the Study

Money laundering is the world's largest industry in terms of turnover after the foreign exchange and the petroleum industry; however there are only a few previous research studies available regarding the matter. (Kehoe, The Threat of Money Laundering, 2021)

Government realized that by confiscating the proceeds from illegal crime is an effective way of attacking the crimes and arresting the criminals. By seizing the illegal monies it is hopeful that the activity will be discouraged.

The second reason for the study is that most banking institutions are unaware on the use of their system to process the illicit monies. The financial sectors especially the banks are in danger of being used by the criminal activities as any negligence in fighting the money laundering will lead to prosecution by the law enforcement. (Kehoe, The Threat of Money Laundering, 2021)

Trade based money laundering is a complicated problem that affects all banking institution mostly through the international financial transfer. Bank and other financial institution require monitoring and adopt regulatory approaches.

Although there are some struggling with the available risk assessment systems, it is estimated that the international response to the suspicious reports from the banking institutions covers 90% of all money laundering cases whilst highlighting the importance of the system (Mc Carthy, 2014)

Many academic reports have paid more attention to the complication and challenges that the financial sector are facing to implement the Anti-Money Laundering regulation. They also discover that many countries have weak Anti-Money Laundering system such as the misplaced of client details and information.

The research on money laundering will lead to huge economy cost to the population and this will endanger the genuine function of the global economy as well as the financial system. This is an entirely justified area for the study.

1.6 The Organisation of the Study

The organization of the study will encompass on the following sections:-

Chapter 1: This chapter discusses the overview of the study which will elaborate more on what is TBML, what are money laundering risk assessment and the law enforcement agencies involve, problem statement, research objectives, research questions and the significance of the study

Chapter 2: This chapter discusses the literature review of the research, the theoretical foundation and the empirical research. It also discusses the proposed conceptual framework, hypothesis development and the conclusion of the review.

Chapter 3: This chapter discusses matters related to the research methodology. It includes the research design, the study population and sampling procedures and the data collection method. The operationalisation and measurement will elaborate on the independent variables, mediating variables and the dependant variables. This chapter will also include the data analysis techniques and the conclusion to the research methodology.

Chapter 4: This chapter will show and discuss the results from the respondent received and discusses matters related to the testing for factor analysis and reliability test of the instruments. It also will include the hypothesis testing and the results of the testing.

Chapter 5: This chapter will recap the major findings of the research and will include the implication and limitation of the study. The research will be finalised with recommendation for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Literature Review is written to provide evidence and to justify the direction of the research. The kind of literature review that was used during this research was the structured review which collects and investigates a number of dissimilar articles which provides information on TBML.

Review of the money laundering discovers that money laundering is not new in the market. Worldwide efforts to combat money laundering and financing terrorism have become important especially after the September 11,2001. Due to this FATF has come up with international guidelines in combating money laundering and recommendations to be followed. This standard serves as a benchmark internationally for the local governments as an instrument within their personal national jurisdiction.

A number of researches have taken the step to examine the magnitude and scope of terrorism financing and money laundering issues (Walker, 2009). Some other researcher concentrate on the compliance of technology in money laundering. Generally the finding shows that financial institution is the most affected sector.

There are research that focus on identifying the trends and threats in money laundering, the techniques applied and the cost involved (Irwin, 2011)

The FATF's standards requires banking sector in following a set of regulations to combat TBML.

The obligations for the banking sectors are:

- The appointment of compliance officer
- To allocate a sufficient amount of wealth
- To manage client identification procedures
- To conduct procedures to meet the requirement of the report
- To conduct procedures to meet the obligations of report keeping
- To conduct process for compliance review
- To setting out procedures how the risk assessment will be conducted

- To conduct a periodic review on how to verify the effectiveness of the compliance system
- To update the Compliance Program and monitor accounts for suspicious activity
- To provide training or guidance to employees
- To share anti money laundering information with the federal law enforcement agencies and other financial institutions.

(FATF, n.d.)

Trade based money laundering is synonym with the criminal gangs activities, corruptions by the politicians and business practise. Without realising, the financial institutions help in moving illegal proceeds by transferring their accounts or remittance of their fund and this will help in concealing the source of the illegal activity (Wit, 2007)

The banking institution in Malaysia has become the centre for the efforts of anti-money laundering. The latest survey done by the KPMG Global Anti Money Laundering admit that money laundering continues to be significant and posed the growing risks to particularly the banking institution (KPMG, 2014)

In this study, the research question emphasis on the trade base money laundering information provided. This review is to answer what is the effect of Trade Based Money Laundering on the risk assessment of the banking sector? Most of the research paper referred were qualitative or discussion papers. The qualitative research are more on exploratory basis and the discussion are more on either legal framework, cases or the challenges facing by banks globally.

For this research literature review, I am using the systematic approach and analysing content which are relevant to TBML activity in the Malaysian banking institution.

2.2 Theoretical Framework

The frontline staffs of banks play an important role in identifying and reporting suspicious transaction. Therefore the competency of the frontline officer is important as the assigned role can performed better through proper training. It can be achieved with enough knowledge, techniques and skills that will evaluate and develop the individual behaviour in carrying out their roles.

The bank officers are the frontline of defence in scanning the risk of money laundering. If they manage to pass the risk without being detected, there will be inevitable damages. For example if a client goes to the bank to open a saving account and the frontline officer fail to detect the risk, the account is already unable to be cancelled. The bank has already absorbed the risk. The critical duty of the frontline officers is in performing the customer due diligence process in order to detect the red flag (Yusarina Mat Isa, 2015). Trade finance involves a lot of documentation such as contracts, side agreements, brochures, product descriptions, shipping manifests and etc. Some of these documents might not be disclosed to the bankers. The review process is heavily depends on manual screening and rely on the experience of the bank personnel. It is a big challenge to the banks as they need to require invest significantly in complex training and monitoring,

A banker must familiar with their client better compared to others. To know the customer is not only to serve their financial needs but also to be able to assess the risk assessment. As we are aware of, banks are the central of clearing house for all trade financial transactions. The frontline officer needs to be alert of suspicious transactions. However this process incurs huge cost to the banking institution which explains why they are reluctant to invest in this issue. The frontline officer should be adequately skilled in order to perform on-going risk assessment.

(Harding, 2009). Bank staff is still lacking of capabilities in dealing with the risk assessment of money laundering. As the method of the money laundering operation constantly change, the financial institution frontline officers need to update their skills and knowledge in assessing the risk.

(Yusarina Mat Isa, 2015) In accessing money laundering risk the officers in the banking institutions are required to have cognitive ability to determine which red flags could have indicated that a person is a money launderer.

Empirical studies shows that **IT infrastructure** also plays an important part in assessing the risk. It is more superior than human judgement when compared to the same signal and unavoidable decision which can lead to worse performance (Lowe, 2002) IT infrastructure in an institution serves as a mechanism in assessing the risk. Bank challenges in detecting TBML activity is the complicated number of data from all the paperwork needed which include trade details, accounts detail and other information.

Banks are unable to detect money laundering using the old way. They need an IT system to assist them. The common IT system used by the major commercial banks in Malaysia are MANTAS (a software by Oracle) and NORKOM Technology. These IT systems are expensive. Banks need to allocate certain amount in their database development. Banking institution also needs to invest in training for their staff to be familiar with the system. Not familiar with the IT technology structure will lead to the risk being undetected. This is due to the poor capability of risk assessment and insufficient IT skills.

Another reason for considering the role of IT as the risk assessment for the banking sector is how the criminals is facilitated by the banking facility and how easier it is now days to transfer large amount of money globally without being detected.

(Fasolo, 2008) Risk assessment supported by IT infrastructure is likely to be superior to unaided human judgement based upon the same set of cues and non-reliance on decision aid led to worse performance.

The study also looks into the respond of the internal audit towards the compliance of AML. There were not many researches available regarding this matter since a lot of TBML research papers stresses on the issues that affect the frontline workers involved in AML. There's a lot to be said relating to the role of internal audit or the compliance dept and AML. The insufficient data in certain section also becomes part of interest in the review.

The new function in the banking sector is the **compliance department**. Their duty is to ensure the compliance with the AMLA and other regulatory requirements. This department will ensure the day to day work of the frontline officers is within the requirement. This will increase their responsibility in accessing the risk better. The compliance department is the second line of defence to detect any red flags. Compliance department is normally the reporting authority in the banking sector to report any suspicious transaction via Bank Negara Malaysia's financial Intelligence System (FINS). The department will assess whether the transaction is true and authorized risk monitoring.

The function of Compliance Department is an essential factor for the success of detecting the risk assessment in the banking sector as their role is to provide a systematic, discipline approach to evaluate and improve the effectiveness of risk assessment, control and governance processes.

(Raghavan, 2006) With the existence of this function, bank officers are required to integrate their day to day work along with meeting the best practices of compliance, thus increasing their responsibility and awareness to access the risk better

As risk management may subsumed within the banking institutions' own objectives on deriving commercial advantages, constant monitoring by the **regulatory authority** may diminish the conflict of maintaining good risk management with optimizing rate of return to the shareholders (Favarel-Garrigues, 2007).

Bank Negara Malaysia is the authority that monitors the operations of the banking institution in Malaysia and money laundering is one of the sections covered. Continual observation by the attended authority gives a major effect to the banking sector that complies with the regulatory standards. Failing to comply with the regulations may lead to the risk assessment substandard by particularly the bank officers. However, Bank Negara Malaysia sometimes have difficulties in prosecuting money laundering issues to court as most money cases is complicated. Cases sometimes took several years just to collect the evidence.

By understanding more of the risk assessment it is easy to know how the criminals can influence the banking officers in order to ease their TBML activities. In concentration the financial institution and the authorities must think as anti-money laundered would think, in

order to ask the questions about the process of risk assessment (Naheem, 2017). The use of this theoretical framework for finding the effect of Trade Based Money Laundering on the risk assessment of the banking sector in Malaysia is an original approach that this research offers.

(Favarel-Garrigues, 2007) As risk management may subsumed within the banking institutions' own objectives on deriving commercial advantages, constant monitoring by the regulatory authority may diminish the conflict of maintaining good risk management with optimize rate of return to the shareholders.

2.3 Empirical Research

Many banking units are involved in Trade Based Money Laundering such as the front office, trade, business and internal audit. According to (Naheem, 2017) there should be a structure that will link to all the units in the banking institution. The system will enable information to process quickly and meaningful. To process this information banks need advice beyond the red flags information. It is known that red flags need to be part of the system of the risk assessment which wills able staff to process the information they received and link it to their own system for client review, transactions and accounts. IT system may speed up the transactions review but if the main operator is unaware of the information requested than this source could be wasted.

There are a few warning reports on the increased ruling and its effect to the banking sector

There are a few warning reports on the increased ruling and its effect to the banking sector particularly the Anti Money Laundering Compliance Department. In particular (Mc Carthy, 2014) stresses on the possible negative effect that ruling alone could reduce the money laundering issue and the cause of risk in evolving professional launderers using former trained banking workers.

Review of the empirical studies:

(Harding, 2009) Competency is the intrinsic know how to complete the assigned roles which can be gathered on the job and through structured training. Competency can be achieved with adequate knowledge skills and techniques that allow identification evaluation and development of the individual behaviour in carrying out the assigned role.

(Mc Carthy, 2014) Highlighted the possible negative impact that regulation alone would have on curtailing money laundering activity and the risk it could cause in developing money launderers using trained former finance staff. Their study suggested that investment into police services to track and capture money launderers would ultimately be a more productive and effective use of resources, rather than increasing the cost of regulation and compliance monitoring

(Baldwin, 2003)Money Laundering is a crime, justified by the fact that whoever launders money is pursuing a way to legitimize their ill-gotten gains which is accumulated via illegal activities and it allows criminals to enjoy the proceeds of their crime

(Johnson, 2001) Money Laundering goes hand in hand with the activities of organized criminal gangs, on-going political corruption and corrupt business practices

(Wit, 2007) With the help of banking institutions, consciously or unconsciously criminals move illegal money through transferring accounts or fund remittance and the source of illegally obtained money will be covered up or concealed.

(Favarel-Garrigues, 2007) To be an expert in assessing money laundering risks, one has to learn the money launderer's twisted mentality

(Mclaughin, 2013) Banking Institutions are paying hefty fines for failing to properly assess money laundering risk such as London Based HSBC Bank that has been fined by the United States regulator for almost USD\$2 billion for failing to stop Mexican drug traffickers from using its banking system to launder money

2.4 Proposed Conceptual Framework

In order to understand on the topic Trade Based Money Laundering topic, a conceptual framework had been developed for the research which shows the independent and the dependent variables.

The independent variables are:-

- 1. The Competencies of the Frontline Officer
- 2. IT Capabilities Infrastructure
- 3. Effectiveness of the Compliance Department
- 4. Efficiency of the Regulatory Requirement

The dependant variables are the outcome of the research which is to identify the effect of Trade based Money Laundering on the risk assessment of the banking sector particularly in Malaysia itself.

The model used in this research is shown in the diagram below

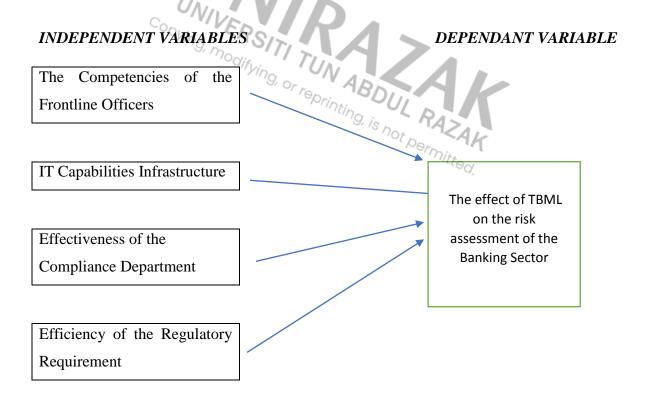


Figure 2.4 Proposed Conceptual Frameworks

From this framework, the five independent variables which are the frontline officers, IT infrastructure, compliance department and regulatory department all are assumed to have a relationship with the risk assessment of the banking sector in Malaysia.

2.5 Hypothesis Development

Hypothesis shows the prediction answer to the research problem. It is the answer to the research questions.

There are 4 types of Research Hypotheses

- Alternative Hypothesis. The alternative hypothesis states that there is a relationship between the two variables being studied (one variable has an effect on the other). ...
- Null Hypothesis
- Nondirectional Hypothesis.
- Directional Hypothesis.

Below are the hypotheses for this research:-

HYPOTHESIS	RISK ASSESSMENT	
	Ten. Bolinia	
H1	There is relationship between the competencies of frontline officers and	
	the TBML risk assessment of the banking sector in Malaysia	
H2	There is relationship between the IT infrastructure competencies and the	
	TBML risk assessment of the banking sector in Malaysia	
Н3	H3 There is relationship between the effective function of compliance	
	department and the TBML risk assessment of the banking sector in	
	Malaysia	
H4	There is relationship between the efficient regulatory requirements and	
	the TBML risk assessment of the banking sector in Malaysia	

Table 2.5 Research Hypothesis

2.6 Summary of Chapter 2

This chapter discuss the relevant literature widely. The Trade Based Money Laundering theory is the aim of this study which focusses on its effect to the risk assessment of the banking sector in Malaysia. Trade based money laundering is not only a real issue to the financial sector but also to the country particularly. Without it, criminals will not have any place to clean their illegal gains. Based on the empirical studies, it shows that banking institution is badly affected due to the TBML activities. In comparison to other types of crimes, money laundering is known for the variety of its forms and settings. (Reuter, 2004) The main purpose of the launderer is to be leading than the law enforcement regulators.

Bank Negara Malaysia is very serious in monitoring the industry money laundering risk. The frontline officers at the banking sector plays an important role in detecting suspicious transactions. They are the defence team.

The study aims to provide more knowledge on the risk assessment of trade based money laundering in a number of ways. Most of the empirical studies reveal more on organizational basic function in risk assessment. The research focusses more on the influence of individual capability in assessing the risk of money laundering. With the launderers main purpose to lead ahead of the enforcement agencies, a launderer normally apply three basic stages in their activities which consist of placement, layering and integration (Reuter, 2004)

Placement is the first stage of the washing cycle of the illegal money in the banking system. The main objective of this cycle is to remove the cash from the acquisition location in order to avoid detection by the law enforcement agencies. This stage is the most difficult of the cycle as they need to convert small denominations of cash into a manageable instrument of asset. They just cannot simply bank in large amount of money daily without being detected.

Layering is when the money is successfully transformed into another asset. The main purpose of this cycle is to disconnect the illegal proceeds and the criminal activity. Normally it is created by transferring the monies out of their offshore bank account by engaging in several transactions such as stocks and commodities.

Integration is the final stage. It is where the illegal monies are being 'spin dry'. It is the process of making the money appear to be legally earned.

Banking institution is likely to be influence by the money laundering risk on several issues. Currently the financial institutions are not aware that they are being used to launder money and without realising they are becoming involved in the criminal activity. When discovered they will surely face cost associated with loss of business or legal action taken. Once being charged it is likely there will be lack of confidence from the client and they will move their money elsewhere. Banks will be under a lot of pressure in obtaining new business and increase their profit.

There are limited public researches regarding this matter therefore this study hopefully will aspire to give the current literature more value added. In line with the academic research, the study on this subject has appeared from the law and from the accounting and finance perspective in order to focus more on the relevant ruling and enactment and whether they are applicable within the specific legislative environment (Dhillon G Rusniah, 2013)



CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The methodology will describe the research design process. It will recognize the research questions and explains reasons the method is chosen. This section will explain the theories of risk assessment of the trade-based money laundering in the banking sector in Malaysia. It will present the methodological approach chosen for the research and explains more on the structure that influence the design of the research. The whole research is based on the conceptual framework and this section will explore and elaborate more on the research design. It will show the detail picture of how the trade based money laundering transaction will affect the banking institution. Under the research methodology we will explain on the study population and sampling procedures used in the study. The findings will be used to determine the effect on the banking sector and finding ways to prevent risk assessment to the banking sector.

3.2 Research Design

The main purpose of research design is to make sure that the results of the research are correct and able to withhold any investigation and criticism. It enables the researcher to come up with solutions to the problems and as a guidance to the researcher in various stages of the research.

The research design in this study is focusing on the explanatory method which able to understand how risk assessment in TBML cases could function. The questions of the research will be applied to several different methods of data collection and a common lens of TBML risk assessment will be used in the investigation section.

The research uses mixed methods technique where combined qualitative and quantitative tools and approaches are applied. The design established a set of issues that will lead to a systematic research. Once the problem is identified, the objective of future research will be more advanced.

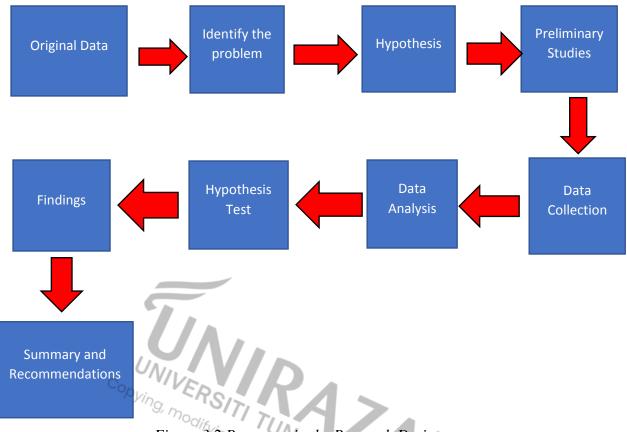


Figure 3.2 Processes in the Research Design

3.3 Study Population and Sampling Procedures

In the selection of the study population and sampling procedures, researcher will select to a population of sporadic.

The first challenge in the data collection research is to come up with a sampling master plan that would represent the banking institution. In this case it will be the Malaysian banking sector.

The selection of samples to be taken covers:

- a) The objective of the study
- b) To identify the sources of information
- c) Identification of the target audience
- d) Determination of the sample size taken

- e) Define survey
- f) Ensuring collection of instrument and data
- g) Define the statistical data and hypothesis
- h) Testing methods

The population of this research consists of those working in the banking and financial sector within 20 km radius. This research is supported by secondary data collected from four areas in Setapak which includes Taman Melawati, Wangsa Melawati, Taman Melati and Wangsa Maju.

The commercial banks involved are:

1. Maybank Berhad

209-10, Jalan Negara 2, Taman Melawati 53100 Kuala Lumpur Tel no :0 3-4107 0115 / 03-4107 0116 / 03-4107 8473

2. CIMB Bank Berhad

227, Jalan Bandar 13, Taman Melawati, 53100 Kuala Lumpur Tel: 1 300 880 900

3. Public Bank Berhad

262- 265, Jalan Bandar 12, Taman Melawati, 53100 Kuala Lumpur Tel: +603-4105 2003 / 03-4105 2004

4. Hong Leong Bank Berhad

No. 266 & 267, Jalan Bandar 12, Taman Melawati, 53100 Kuala Lumpur Tel: +603-4106 8951

5. Bank Islam Malaysia Berhad

No. 254 & 255, Jalan Bandar 12, Taman Melawati, Hulu Klang, 53100 Kuala Lumpur Tel: +603-4107 7800 / 6842 / 6852

6. Bank Simpanan Nasional

No.313 & 314, Lorong Selangor, Pusat Bandar Melawati, 53100 Kuala Lumpur Telephone +60 (3) 41058453 & 73 Jln Melati Utama 4, Melati Utama 53100 Kuala Lumpur Tel no:03-41054421

7. Bank Muamalat Malaysia Berhad

Lot G-3A, B-1-3 & G-05 Melawati Corporate Office, Taman Melawati, 53100 Kuala Lumpur

Tel:03-26005500

8. RHB Bank Berhad

No. 58, 58-1 & 58-2, Jalan Dataran Wangsa Melawati, Wangsa Melawati 53300 Kuala Lumpur.

Tel no: 03-4142 1905

9. Ambank Berhad

No.54 & 56 Jalan 1/27F, Pusat Bandar Wangsa Maju , 53300 Kuala Lumpur

Tel no: 03-4149 5191

10. Bank Rakyat

326 Jln Bandar Melawati, Pusat Bandar Melawati, 53100 Kuala Lumpur

Tel no: 1300-80-5454

Sample is the selected item or represent to population studies. Sample that will be selected must represent the population in order to obtain a comprehensive interpretation of the population. The random sampling is used in this method to reduce the sampling error in particularly small sample size. Random sampling is used when the population may divide units in each unit with the characteristics of the population. The study did not take any bank's staff involve in large population due to limitation of time and on financial resources.

3.4 Data Collection Method

3.4 Data Collection Method

The methods that were used for the data collection were chosen to support the nature of the research questions, which were observed and contemplate the international perspective of money laundering and TBML issue across the banking institution. The first step was to collect the feedback from those who work in the sector from both the banking view and also from a financial intelligence and analysis perspective and evolve a broad level of information in the whole sector.

The questionnaires developed were based on the samples from past researchers such as from Mohamad Ahmad Naim (2017) from University of Wolverhampton, England who studied on Trade Based Money Laundering: Exploring the Implications for International Banks and Jamaliah Said, Erlane K. Ghani, Normah Omar & Sharifah Norzehan Syed Yusuf (2013) from the Accounting Research & Institute and Faculty of Accountancy, University Technology MARA, Malaysia on their study Money Laundering Prevention Measures among Commercial Banks in Malaysia.

The questionnaires are divided into two parts where the first part, Section A comprises of questions related to the importance of measures set by the international regulations and to which level is the implementation. Respondents are asked to give their feedback based on the scale given. The second part, Section B requests the respondent to evaluate the level of trade based money laundering risk assessment using 5 point scale.

The self-administered questionnaires were distributed in a form of survey and filled up by the respondents. The data collections were completed with the assistance of some colleagues. The questionnaire will be accompanied by a reference letter to the purpose of the study and asks the respondent to provide sincere answers without any bias. Questionnaires will be in paper form and mailed to participants, delivered in electronic format via email or other internet based programme. Using a combination of methods can help to provide better sample coverage.

The instrument use is a cross-sectional self-administered questionnaire which distributed to the participants in the form of questionnaire. In designing the questions in this survey, the questionnaire will consists of items complied to the hypothesis and variables, represented in a Likert-scale formatting based on five categories for Section B (Strongly disagree, disagree, neutral, agree, strongly agree), the five categories are displayed in numerical form, to make the questionnaire easy and clear for the participants in the questionnaire as follows: is not permitted.

1 represented strongly agree,

2 represented agree,

3 neutral,

4 represented disagree, and

5 represented strongly disagree.

Strongly agree	e	Neutral		Strongly disagree
1	2	3	4	5
	1 – Strongly Agree 2 – Agree 3 – Neutral 4 – Disagree 5 – Strongly Disagre	ee		

(Elise Whitely, 2002) The scale presents the respondents with a set of statements about a person, a thing or a concept and the respondents are required to indicate how strongly they feel, positively or negatively about the statements.

The findings from the data collection method provide the explanation to all the research objectives and research questions. The finding from Section A revealed that most of the banking institutions in Malaysia take their responsibility seriously towards trade based money laundering measures. The finding in Section B shows that the reason for low level of money laundering is due to the lack of support from the top management, lack of expert frontline staff, lack of IT infrastructure and lack of compliance to the regulation.

3.5 Operationalisation and Measurement

The operationalisation and measurement observed the kind of analytical methods that will be applied to the data, and what conclusions can be made by the data. Operationalisation is the system of the particular study issues and the process in the empirical assessments and showing the views. It helps in capturing the domain of the construct of using the information that is needed as the specified challenge in the different steps of research methodology.

For measurement there are four different scales which are:

- 1) Nominal
- 2) Ordinal
- 3) Interval
- 4) Ration

<u>NOMINAL</u>	<u>ORDINAL</u>	<u>INTERVAL</u>	<u>RATIO</u>
Categorizes Labels, classifies, names or identifies types of kinds of things that can't be quantified	Provides rank order or objects or individuals from first to last or best to worst	Includes rank ordering and additional characteristic equal intervals or distances between adjacent numbers	Includes rank ordering equal intervals and the additional characteristic and absolute zero point (which permits forming ratio statements)

Table 3.5: Types of measurement scales

It is important to know the different status of measurement as the levels of measurement, together with how the research question is express, prescribe what statistical analysis is appropriate.

3.5.1 Independent Variables

Independent variable is a variable that is being manipulated in an experiment in order to observe the effect on a dependant variable. It is a variable whose change isn't affected by any other variable in the experiment .In other words it is a variable that stands alone.

In this study there are 4 independent variables which are:-

1. The Competencies of the Frontline Officers

Which discusses on the behaviour and personal moral of the employees individually? In this context it shows that people working in the banking institution can do a lot of things on behalf of the criminals. Bank employees can be bribed or blackmail into assisting crime activity. A lack of ethic is not only the risk assessment to the banking sector but insufficient training and capability can also lead to report not being disclose in order to avoid the burden of documentation.

2. IT Capabilities Infrastructure

The research will discuss on the relationship between technology and TBML compliance as the biggest challenges in detecting TBML is the amount of information that can collected form all the paperworks, accounting details and client information.

3. Effectiveness of the Compliance Department

Which discusses on the function of the compliance department as one of the lead player in detecting money laundering activity? The compliance department need to check the basis of the assumptions made by their institution in the processing and focusing of the approach taken. This study aims to look deeper on the function of this department and how it fit into TBML compliance.

4. Efficiency of the Regulatory Requirement

TBML is a global crime with no limitation to the borders. In successfully detecting TBML needs a global effort. This research shows how the regulatory department plays an important role in assisting the banking sector in the risk assessment.

3.5.2 Mediating Variables

A mediating variable is a variable that links the independent and the dependant variables. It's the relationship between the two variables allowing it to be better explained. Mediating Variables can be difficult to interpret, and care must be taken when making conclusion. However in this research there is no mediating variable.

3.5.3 Dependants Variables

The dependent variable is the variable being tested and measured in an experiment and is 'dependent' on the independent variable. In an experiment the researcher is looking for the possible effect on the dependent variable that might be caused by changing the independent variable. The dependant variable for this study is to identify the effect of TBML on the risk ng, or reprinting, is not permitted. assessment of the banking sector.

3.6 Data Analysis Techniques

The data analysis techniques consists of two elements, the primary data collected based on the review and then the result of the secondary data. The study then investigates the result and compares the results against other previous research. These questions represented the research questions from the literature review which were designed to flow towards gathering data and eventually develop an appropriate risk assessment tool. The research needs to focus on developing an understanding on how TBML cases will affect the banking sector and how to assess it. As for the risk assessment process the researcher need to find out who is responsible for AML and TBML detection and whether require any upskilling training. By merging the research information on how TBML works and how criminals at present time are exploiting the system, as well as understanding the criminal's desire for wanting to transfer

money in this way, in hoping to match this to the structure of detection and where necessary steps taken to strengthen this process (Naheem, 2017).

3.6.1 Descriptive Analysis Techniques

Descriptive analysis is used to explain more on the basic characteristic of the data. It provides straightforward summaries about the sample and the measures. Together with the simple graphic analysis, they form the basis of every quantitative analysis of data (Trochim, 2021)

There are four main types of descriptive statistic:

1. Measures of Frequency – shows how often things occur.

-eg: percent, frequency

2. Measures of Central Tendency – use to show average response

- mean, median, mode

3. Measures of Dispersion - use to show how spread out a data was.

- range, variance, standard deviation.

4. Measures of Position – use to compare scores to normalized scores.

- percentile ranks , quartile ranks

3.6.2 Inferential Analysis Techniques

Inferential analysis is used to generalize the results obtained from a random (probability) sample back to the population from which the sample was drawn. by a random procedure; and, the response rate is very high.

The methods of inferential statistics are (1) the estimation of parameter(s) and (2) testing of statistical hypotheses.

3.7 Summary of Chapter 3

The research methodology in this research has been comprehensively discussed. Under research methodology the discussion were on the research design, study population, sampling procedures, data collection method, the operationalisation and measurements and lastly the data analysis techniques.

This research is using an exploratory research design. The research also used both primary and secondary data sources in order to make sure that the full aspect of opinions and exploration on the topic were presented. The data from this research was taken from several sources of primary and secondary data. The primary data was collected from the questionnaire distributed to the commercial banks within 20km radius via email and online survey. The secondary data sources included other academic research as well as previous based surveys, interviews and reports and sources from Bank Negara Malaysia, FATFA and AMLA website. The operationalisation and measurement were based on the independent and dependant variable. Data analysis will be based on the descriptive analysis techniques or the inferential analysis techniques which will be done in the future research paper.



CHAPTER 4

RESULT AND DISCUSSION

4.1 Introduction

In this chapter, the raw data that I received from the feedback done by respondent's will be interpreted and analysed based on the SPSS and outcome from Google Form .Total of 180 questionnaires have been distributed online. The questionnaires were distributed to several banks within the four areas in Setapak which includes Taman Melawati, Wangsa Melawati, Taman Melawati and Wangsa Maju. However only a total of 101 feedback were collected which represent 56.11% of total respondents. This is due to the current Covid 19 pandemic and the government Movement Control Order.

4.2 Respondent Profile

The chart below shows a detail respondent profile that includes their gender, age and education background. Based on the respond that I have received from 101 respondent, most of them are female which represent a total of 61.4% and male of 38.6%. From the total respondent 45.5% are from the age group of 46 to 60, 40.6% from the age of 31 to 45 years old and follows by age group 18 to 30 representing 12.9%.

For the education background ,56.4% hold a bachelor's degree holders while 16.7% are postgraduate degree or higher education.15.8% of the respondent obtain higher secondary education and only 2.1% with secondary or below education background.

Below are the charts that represent the respond received from the survey:-

Gender responses

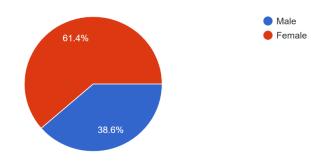


Figure 4.2 : Gender

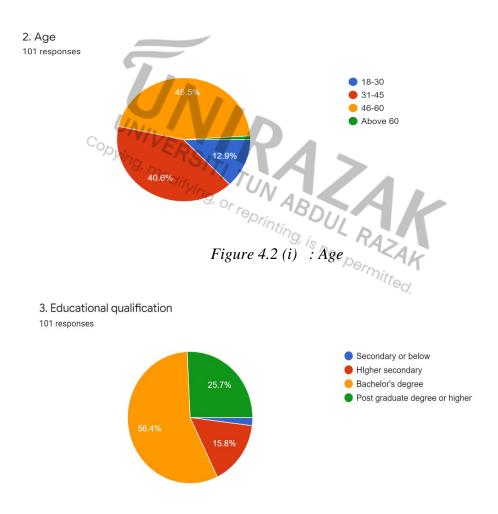
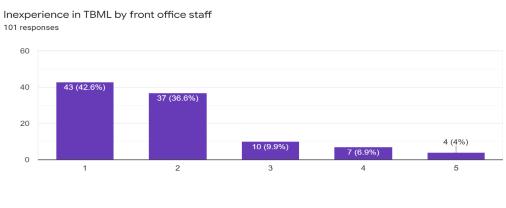
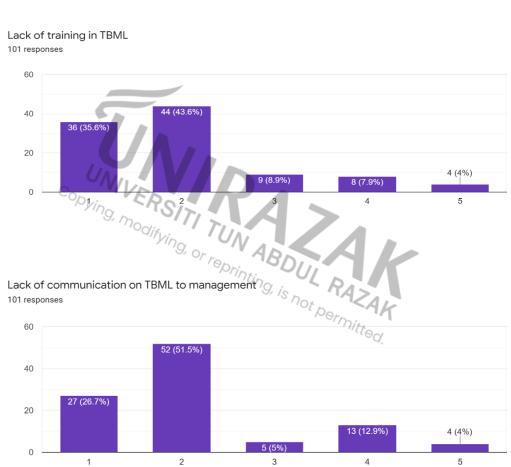


Figure 4.2(ii): Educational Qualification

From the above chart it can be concluded that most of the respondents are female (61.4%), age range of 45-60 years with 56% of them holds a bachelor's degree





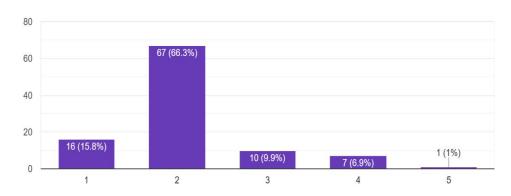
Lack of resources 101 responses 60 52 (51.5%) 40 20 17 (16.8%) 16 (15.8%) 4 (4%) 12 (11.9%) 2 3 4 5



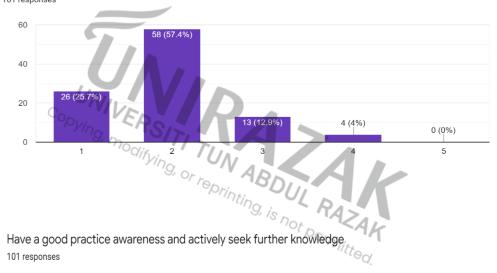
Most of the respondents agreed that inexperience in TBML is one of the impediments to trade based money laundering with 42.6% strongly agreed and 36.6% agreed. Lack of training is also one of the impediments with 35.6% strongly agreed while 43.6% agreed.51.5% agreed on the lack of communication to management and lack of resources. No link with the internal audit is also one of the reason with 46.5% respondent agreed.

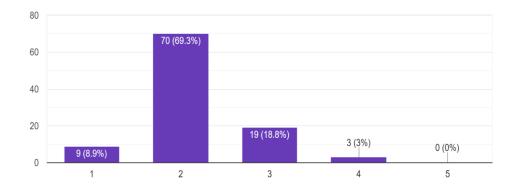
Know the basic

101 responses

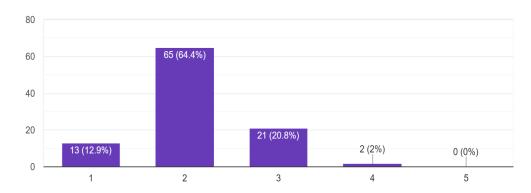


Aware through audit committee





Very aware and practice in implementing new approaches 101 responses



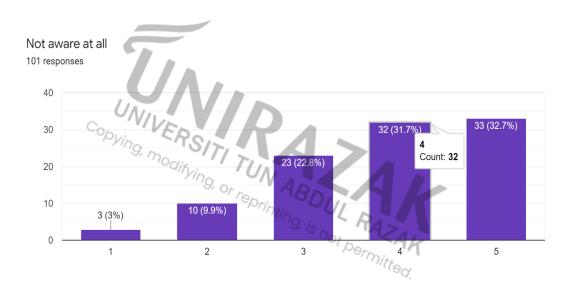
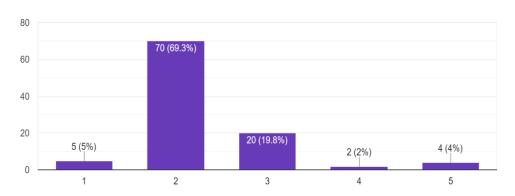


Figure 4.2(iv): How aware are senior management about TBML within your organization?

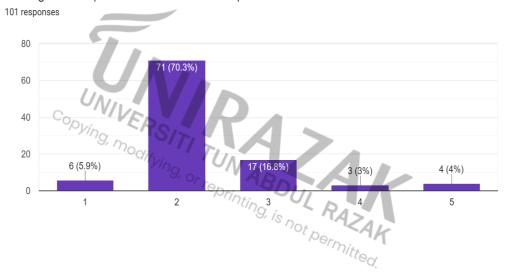
From the survey, the responds received indicate that most of the senior management are aware of TBML where 66.3% agreed that they know the basic of TBML and 57.4% said that the management are aware through audit committee. 69.3% agreed that the management in their organization have a good practice awareness and actively seeking further knowledge.

Some level of co-operation

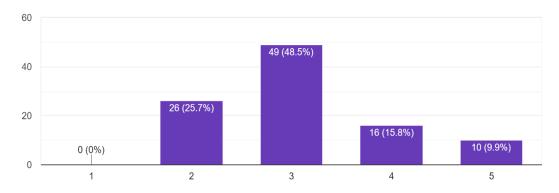
101 responses



Seeking to develop a more co-ordinated audit plan

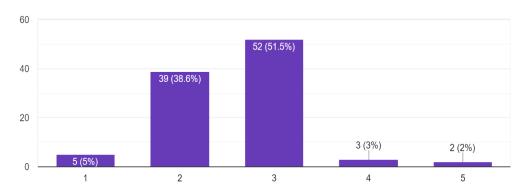


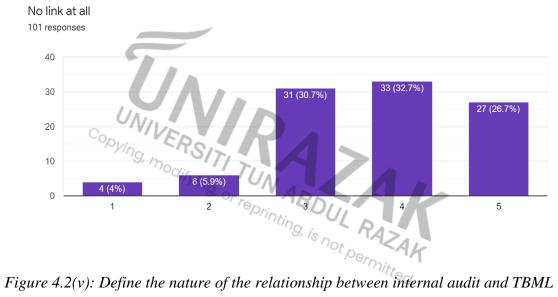
A limited working relationship



Strong working relationship

101 responses



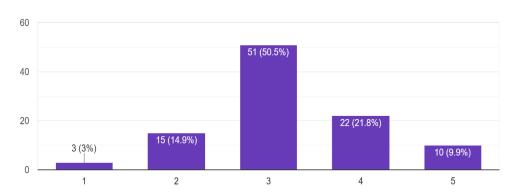


compliance within your organization

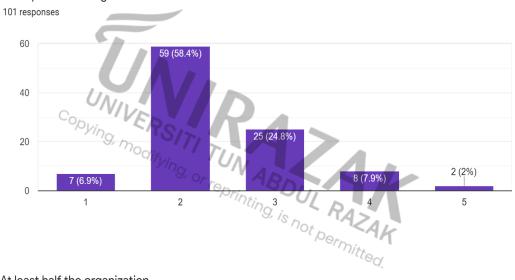
69.3% of the respondents agreed that there are some levels of co-operation between internal audit and the compliance department .70.3% agreed that both parties are seeking to develop a more coordinated audit plan. Most of the respondent are neutral in giving their responds towards the level of the above relationship.

No progress is being made

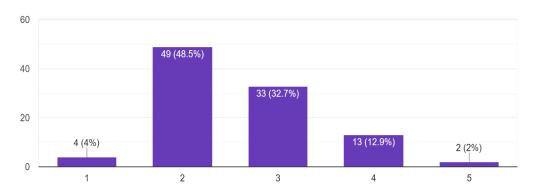
101 responses



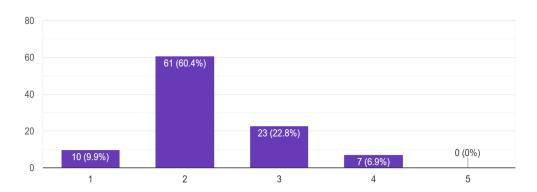
Most part of the organization

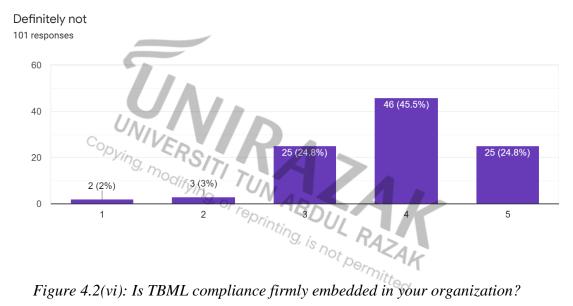


At least half the organization



All are very aware and proactive in implementing new approaches 101 responses

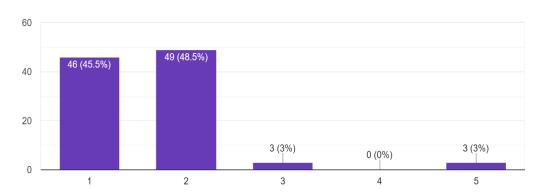




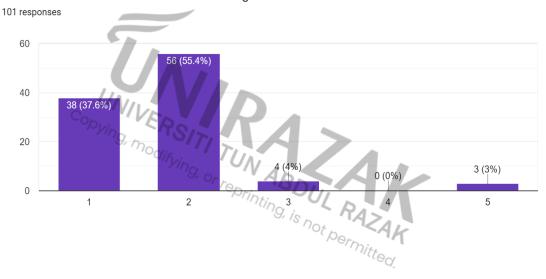
58.4% of the respondent agreed that most part of their organizations is firmly embedded with TBML while 48.5% said that at least half of their organizations are firmly embedded.

Additional training on TBML officers

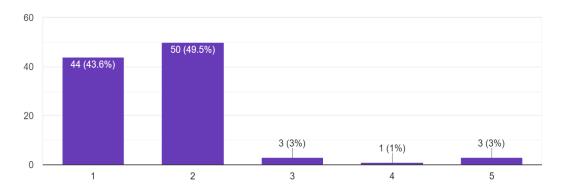
101 responses



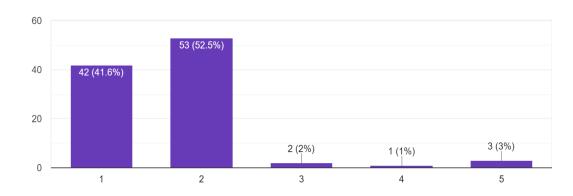
More communication on TBML across the organization



More training for front office staff



Internal audit more involved 101 responses

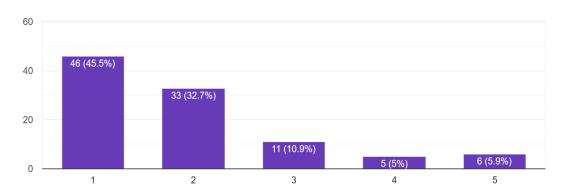


Stronger communication to management 101 responses 60 40 20 1 2 2(2%) 1 (1%) 3 (3%) 1 2 5

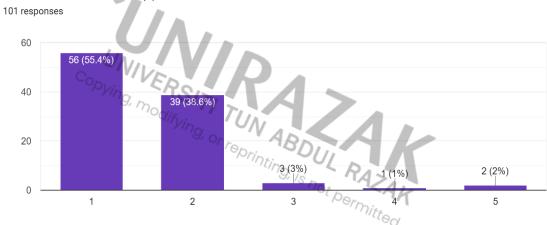
Figure 4.2(vii): Improvement that are needed

There are several improvements suggested. Most of respondent agreed on additional training regarding TBML and also the need to communicate more regarding TBML across their organization. 43.6% agreed while 49.5% strongly agreed on organizing more training to the frontline bank officers.52.5% agreed that the internal audit should get more involved in detecting TBML. 59.4% agreed that there should be a stronger communication to management regarding this issue.

TBML is a new concept for banking sector

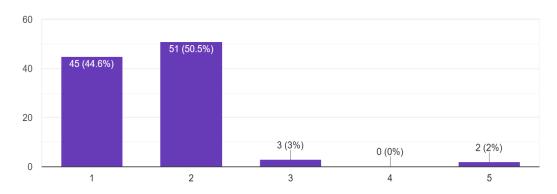






Banks should be taking on stronger investigate role in client behaviour, beneficial ownership and transaction details

101 responses



The need to raise awareness of the risk that TBML poses among staff

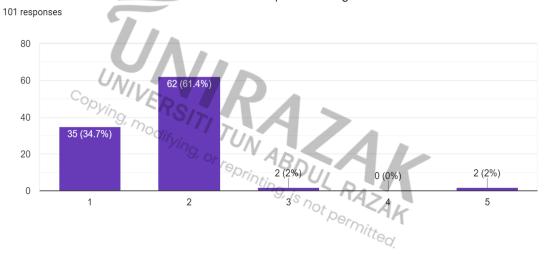
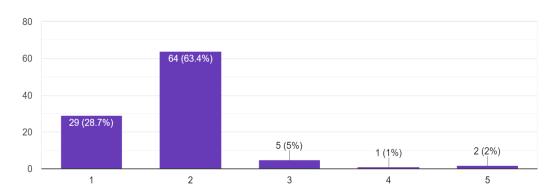


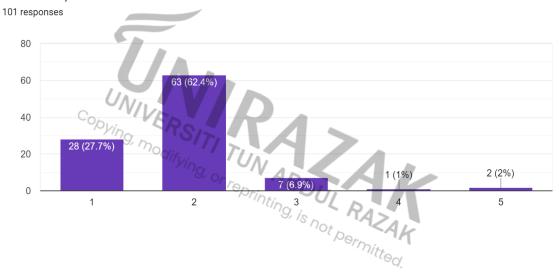
Figure 4.2(viii): Competencies of Frontline Officers

The use of International Trade Alerts Software

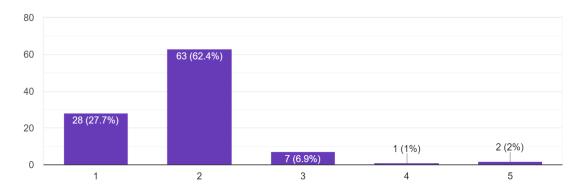
101 responses



Use of analytic tools such as iDetect

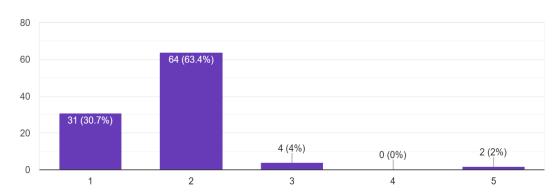


Use of analytic tools such as iDetect

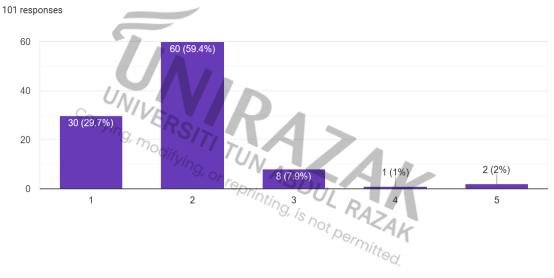


Audit access to treasury system

101 responses



Invest in software to compare trade prices



Lack of integrated detection system

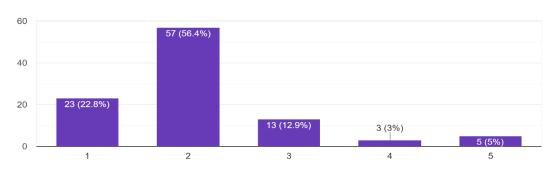
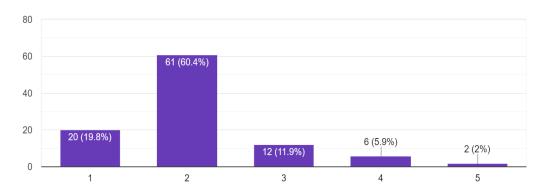


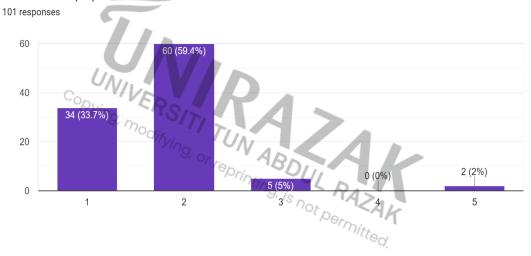
Figure 4.2(ix): IT Capabilities Infrastructure

TBML risk compliance is a step too far for banks as many appear to be struggling to cope with the average Anti Money Laundering Compliance

101 responses

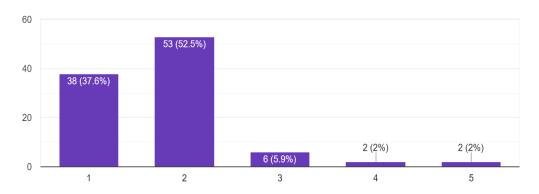


Internal Audit plays a role in TBML risk assessment



Compliance Dept should audit suspicious activity reports and follow the trail to access the effectiveness of the risk assessment tools

101 responses



 ${\it Jointly develop the risk assessment approach alongside Anti Money Laundering and management}$



Increase prosecution for TBML crimes

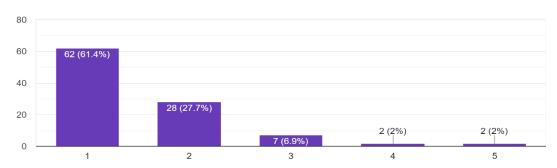
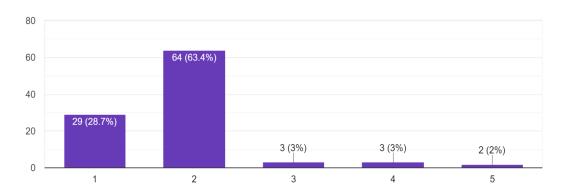


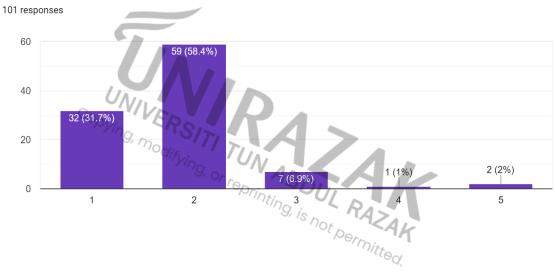
Figure 4.2(x): The Effectiveness of the Compliance Department

Senior management acknowledge that TBML is a risk

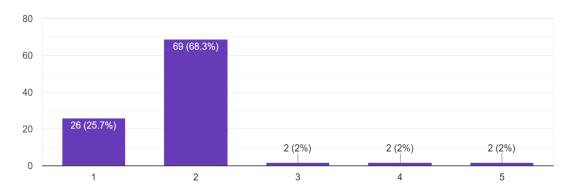
101 responses



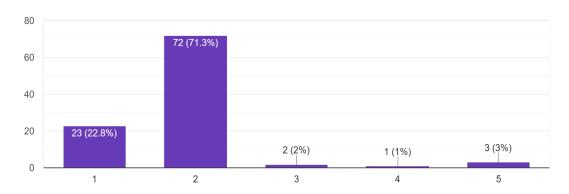
Firmly embed TBML awareness culture across organization



Strengthening knowledge flow at international level among peers



Clear TBML policies understood and developed at top management 101 responses



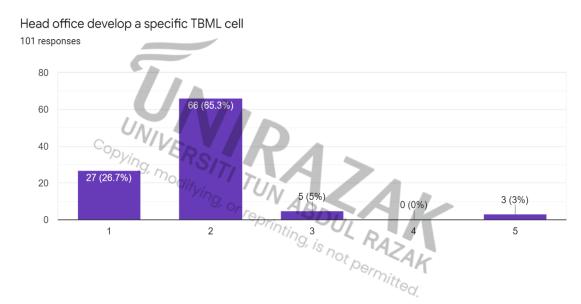


Figure 4.2(xi): Efficiency of the Regulatory Requirement

From the charts above it shows that most respondents agreed that The Competencies of Frontline Officer, IT Capabilities Infrastructure, The Effectiveness of The Compliance Department and the Efficiency of the Regulatory Department plays an important role in detecting or preventing Trade Based Money Laundering in the banking sector in Malaysia.

4.3 Descriptive Statistic

Quantitative analysis is important in a research as it is where the data collected is being analysed. It is a simple way to describe the data. The raw data from 101 respondents that have been chosen to participate in the survey was transferred to SPSS, software used by researchers for complex statistical data. Several tests were conducted using the SPSS. In this research the researcher has run several analyses such as the quantitative, multiple regressions and the correlation analysis.

Descriptive Statistics

		Statistic	Std Error
Competencies of frontline	Mean	1.55	0.078
officer			
7/1.	95%Confidence interval '-lower bound	1.40	
.0/	,- upper bound	1.71	
CONIVE	5% Trimmed mean	1.45	
Copying, modify	Median	1.00	
dify	Variance	0.610	
	Standard Deviation	0.781	
	Minimum 19, is not	1	
	Maximum	5	
	Range	4	
	Interquartile Range	1	
	Skewness	2.131	0.240
	Kurtosis	6.557	0.476
IT Capabilities Infrastructure	Mean	2.37	0.101
	95%Confidence interval '-lower bound	2.17	
	,- upper bound	2.57	
	5% Trimmed mean	2.31	
	Median	2.00	
	Variance	1.034	
	Standard Deviation	1.017	

	Minimum	1	
		Statistic	Std. Error
	Maximum	5	
	Range	4	
	Interquartile Range	1	
	Skewness	0.837	0.240
	Kurtosis	0.255	0.476
The Effectiveness of the	Mean	1.77	0.72
Compliance Department			
	95%Confidence interval '-lower bound	1.63	
	,- upper bound	1.91	
	5% Trimmed mean	1.70	
	Median	2.00	
	Variance	0.518	
//x	Standard Deviation	0.719	
UNI.	Minimum	1	
COPYING, MODIFY	Maximum	5	
y, modify	Range	4	
	Interguertile Denge	1	
	Skewness Kurtosis Mean	1.6866	0.240
	Kurtosis	6.447	0.476
Efficiency of the regulatory	Mean	1.83	0.076
requirement			
	95%Confidence interval '-lower bound	1.68	
	,- upper bound	1.98	
	5% Trimmed mean	1.76	
	Median	2.00	
	Variance	0.581	
	Standard Deviation	0.762	
	Minimum	1	
	Maximum	5	
	Range	4	

Interquartile Range	1	
	Statistic	Std.Error
Skewness	1.538	0.240
Kurtosis	4.825	0.476

Table 4.3 Descriptive Statistic

Table 4.3 shows the descriptive statistic for variables based on the raw data keyed -in using the IBM SPSS. Descriptive statistics are used to present quantitative description in a manageable form. In other words it helps to simplify large amount of data in a sensible way.

From the table above it was recorded that "Competencies of Frontline Officer" has recorded means of 1.55 which indicates that most of the respondent strongly agreed that the competency of the frontline officer in the banking sector plays an important role in detecting the risk assessment caused by Trade Based Money Laundering. It also shows a standard deviation of 0.781 which means that the data collected is reliable. The skewness shows an acceptable value of 2.131. A positive value of skewness (or right-skewed) indicates that most values are clustered around the left tail of the distribution while the right tail of the distribution is longer. The kurtosis shows an acceptable figure of 6.557 which shows that the data has heavier tails than a normal distribution.

For the data received on the IT Capabilities Infrastructure it shows a mean of 2.37 .Most of the respondent agreed that IT capability infrastructure plays an important role in preventing trade based money laundering. The standard deviation showed a figure of 1.017 which means the data collected are more reliable. The positive skewness of 0.837 and kurtosis of 0.255 are still in the acceptable value.

The Effectiveness of the Compliance Department data collected shows a mean of 1.77. Most of the respondent agreed that the effectiveness of the compliance department has an effect on the risk assessment of the banking sector for trade based money laundering. The standard deviation shows a reliable value of 0.719 .It also shows a positive skewness of 1.072 and positive kurtosis of 0.450.

For the data collected on the efficiency of the regulatory requirement, it shows a mean of 1.83, standard deviation of 0.762 while the skewness of 1.538 and a positive kurtosis of 1.66.

4.4 Tests of Normality

The researcher also did the normality tests on the data collected .Normality tests are normally used to determine whether the raw data is well modelled by a normal distribution and used to compute the likeliness of the random variables underlying the data set to be normally distributed. The normality test done under this research are the Kolmogorov – Smirnov and Shapiro-Wilk.

The Kolmogorov -Smirnov test uses the sample mean and standard deviation in order to calculate the expected normal distribution. The smaller the maximum difference the more likely that the distribution is normal. This test is less powerful than the other tests but it is a popular test among researchers.

The Shapiro-Wilk tests for normality is designed to detect all departures from normality. It is comparable in power to the other tests . This test will reject the hypothesis of normality when the p – value is less than or equal to 0.05. It is the best choice for testing the normality.

Kolmogorov-Smirnov Shapiro-Wilk

y, modifyin	Statistic	df	Sig	Statistic	df	Sig
Competencies of Frontline Officer	0.316	101	0.000	0.658	101	0.000
IT Capabilities Infrastructure	0.314	101	0.000	0.844	101	0.000
The Effectiveness of the Compliance	0.306	101	0.000	0.692	101	0.000
Department			117	90'		
Efficiency of the Regulatory	0.314	101	0.000	0.727	101	0.000
Requirement						

Table 4.4 Tests of Normality

The normality test can answer the research questions of the study which is:

What is the relationship between The Competencies of Frontline Officers, IT Capabilities Infrastructure, The Effectiveness of the Compliance Department, and The Efficiency of the Regulatory Department with the TBML risk assessment of the banking sector in Malaysia

It can also answer the hypothesis for the research.

• Hypothesis 1,H1

The hypothesis testing for the first Independent variable is there is relationship between the competencies of frontline officers and the TBML risk assessment of the banking sector in Malaysia .The normality test shows that in this relationship the p value is 0.000 (Shapiro-Wilk) which is lesser than the significance value of 0.05. This shows the variables has significant influence towards the dependant variables, therefore the hypothesis of H1 is accepted and the H0 is rejected.

• Hypothesis 2 ,H2

There is a relationship between the IT Capabilities Infrastructure and the TBML risk assessment of the banking sector in Malaysia. The normality test shows that in this relationship the significance value is 0.000 (Shapiro-Wilk) which is lesser than 0.05. This shows the independent variables has significant influence towards the dependant variables, therefore the hypothesis of H2 is accepted and the H0 is rejected

Hypothesis 3, H3

There is a relationship between The Effectiveness of the Compliance Department and the TBML risk assessment of the banking sector in Malaysia. The normality test shows that in this relationship the significance value is 0.000 (Shapiro-Wilk) which is lesser than 0.05. This shows the independent variables has significant influence towards the dependant variables, therefore the hypothesis of H3 is accepted and the H0 is rejected .

• Hypothesis 4, H4

There is a relationship between The Efficiency of the Regulatory Requirement and the TBML risk assessment of the banking sector in Malaysia. The normality test shows that in this relationship the significance value is 0.000 (Shapiro-Wilk) which is lesser than 0.05. This shows the independent variables has significant influence towards the dependant variables, therefore the hypothesis of H4 is accepted and the H0 is rejected

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4.5 Correlation Analysis

Correlation Analysis is a statistical tool used to determine the strength of relationship between two quantitative variables. The type of correlation analysis used in this research is the Pearson Correlation Coefficient. High correlation means that two or more variables have a good relationship with one another. A low correlation means that the variables are not closely related. In this research, the relationships between each variable with the TBML risk assessment of the banking sector in Malaysia are examined by using the correlation analysis. A perfect positive correlation has a coefficient of 1.0 and if there's no correlation, it will be denoted by 0.

Coefficient Correlations

	// _	Inexperience	Competencies of
	$\bigcup \Lambda I_{I_{1}}$	Front Officer	Front Officer
Inexperience Front	Pearson Correlation	1	0.414
Office Opin	Sig (2 tailed)	Λ	0.000
	Nochia T	101	101
Competencies of	Pearson Correlation	0.414	1
Front Officer	Sig (2 tailed)	0.000	
	N	9, 15, 74101	101

Table 4.5 Correlation between inexperience front officers with the competencies of the front officer.

		IT Capable	Invest in trade
		Infrastructure	software
IT Capable	Pearson Correlation	1	0.427
Infrastructure	Sig (2 tailed)		0.000
	N	101	101
Invest in trade	Pearson Correlation	0.427	1
software	Sig (2 tailed)	0.000	
	N	101	101

Table 4.5 (i) Correlation between the IT Capable Infrastructure and Investment in Trade Compare Prices Software

		Link with	The Effectiveness
		internal audit	of the Compliance
			Department
Link with internal	Pearson Correlation	1	0.223
audit	Sig (2 tailed)		0.025
	N	101	101
The Effectiveness	Pearson Correlation	0.223	1
of the Compliance	Sig (2 tailed)	0.025	
Dept	N	101	101

Table 4.5 (ii) Correlation between the relationships of the link with internal audits and the effectiveness of the compliance departments.

		Strong	Efficiency of the
		knowledge at	Regulatory
-		international	Requirement
		level	
Strong Knowledge	Pearson Correlation	1	0.433
at international	Sig (2 tailed)		0.000
level	N .	101	101
Efficiency of the	Pearson Correlation	0.433	1
Regulatory	Sig (2 tailed)	0.000	
Requirement	N "9, or A	101	101

Table 4.5 (iii) Correlation between the relationship with strong knowledge at international level and the efficiency of the regulatory requirement.

From the correlation tables above the researcher managed to identify the relationship between variables. For Competencies of the Frontline Officer, IT Capabilities Infrastructure, The Effectiveness of the Compliance Department and the Efficiency of the Regulatory Requirement shows a Pearson correlation of 0.414,0.427.0.223 & 0.433 respectively .This indicates that the relationship is good at significant level 0.000 except for the Effectiveness of the Compliance Department at significant level of 0.0025

4.6 Multiple Regression Analysis

Multiple regression analysis is used by the researchers to access the strength of the relationship between the dependent variable and the independent variables as well as the importance of the variables to the relationship.

In the multiple regression analysis, the F -statistics and the significance value (sig.) were recorded to resemble the significant of the variables. The coefficients of determinant or variance (R2) were also well portrayed in multiple regressions that show how much the independent variables are influencing the dependant variables. The beta coefficient (B) will describe how much the influence of each independent variables towards the dependable variables. The largest amount of beta indicates the stronger contribution on the dependant variables, in absolute value and vice versa.

Model Summary^b

Model	R	R Square	Adjusted R	Std. Error of the
	·UA	1	Square	Estimate
1	0.419 ^a	0.175	0.150	0.720

a. Predictors (constant): Competencies of Frontline Officers, IT Capabilities Infrastructure, b. Dependant Variable: Risk Assessment

Table 4.6 Model Summary Efficiency of Compliance Department & Effectiveness of Regulatory Requirement.

The Model Summary portrayed the value of R,R² and adjusted R² as well as standard error of the estimate using the Enter Method. Based on the table above the R² equals to 0.175. It shows that only 17.5% of the variation is explained by the model.

ANOVA^a

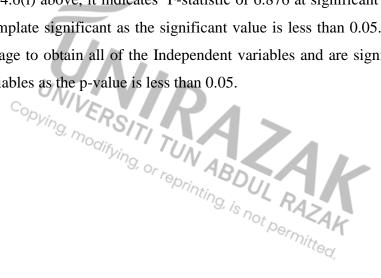
Model		Sum of	df	Mean	F	Sig
		Square		Square		
1	Regressiom	10.689	3	3.563	6.876	0.000^{b}
	Residual	50.262	97	0.518		
	Total	60.950	100			

a. Dependant Variable: Risk Assessment

b. Predictors: (Constant): Competencies of Frontline Officers, IT Capabilities Infrastructure, Efficiency of Compliance Department & Effectiveness of Regulatory Requirement.

Table 4.6(i) ANOVA

Based on table 4.6(i) above, it indicates F-statistic of 6.876 at significant level of 0.000. The model is contemplate significant as the significant value is less than 0.05. In other words the researcher manage to obtain all of the Independent variables and are significant towards the dependable variables as the p-value is less than 0.05.



4.7 Discussion

From the result obtained above, it shows that the researcher is able to obtain a thorough analysis on the raw data collected through the IBM SPSS. The main objective of the research is to study on the effect of trade based laundering on the risk assessment of the banking sector in Malaysia.

From the information gathered the researcher is able to get a clear picture of the risk assessment of TBML towards the banking sector. The researcher managed to understand the relationship between all 4 independent variables towards the dependable variable.

Several tests have been conducted such as the normality test, correlation analysis and multiple regression analysis in order to answer the research objective and research questions of the study. From the analysis, the researcher managed to identify that all of the relationship are in a strong position.

Therefore from the analysis done above, the researcher may conclude that the results obtained were addressed by both the Research Objective and Research Questions of the study.



CHAPTER 5

CONCLUSION

5.1 Recap of the Study

This research study is unique as it focuses exclusively on the one type of money laundering scheme which is the Trade Based Money Laundering. TBML is relatively a new and a complex issue to understand and it is increasingly being used by criminals organisation around the world. This research will focus and raised a number of issues that will link TBML to the banking risk assessment in Malaysia.

The study has summarised the findings of the research where a number of factors are being known as hazards to the banking sector. The distributions of the questionnaires in this research are designed specifically to answer the Research Questions in Chapter 1. In this chapter the researcher will elaborate more on the results and findings from Chapter 4. From these results the researcher will arrive at a conclusion and provide insight into the recommendations based on the findings from the SPSS result analysis.

The research implication will help to illustrate the contribution of seeking solutions to the defined problem statement. Limitation of the analysis will also be discussed in this chapter and finally this study will provide information and recommendations for future research. on. Printing, is not permitted.

5.2 Implication of the Study

The research aim is to contribute to the discussion and to raise awareness on trade based money laundering as a form of financial crime. The study raised a number of issues that is pertinent to the risk assessment of the banking sector.

90% of the respondent agreed that inexperience in TBML by front office staff is one of the impediments to trade based money laundering. 80 % agreed on the lack of training and 47% agreed to no link with the internal audit.

The data collected also revealed that 67 % of the senior management only know the basic on the TBML issue and most of them are aware on the issue through audit committee. 70 % agreed that their senior management have a good practice awareness and actively seeking further knowledge. In the research it can be concluded that most of the senior management are very aware and practice in implementing new approaches.

All the feedback received is very valuable and valid in order to detect the risk assessment as mention in the literature review. Competencies of frontline officer plays an important role in detecting TBML. Banks should be taking on stronger investigate role in client behaviour, beneficial ownership and transaction details.

From the research we are aware that IT infrastructure capabilities also play an important role in detecting TBML. Many agreed on the investment on trade alert software in order to detect the crime. Many respondents agreed that banks should also invest in software that can compare trade prices. This is valuable in detecting trade based money laundering.

The research also discovered that TBML works alongside other money laundering crimes . This is also the reason why there is the need to share and exchange information across the organizations. Internal communication in an organization is important and needs a lot of improvements.

The research worked from the theoretical framework that focuses on the relationship between the regulators and the banks and then the banks and their client. This leads to an argument as to why the increase in prosecution is essential.

Changes need to be developed such as enhancement in the risk assessment training and risk system development in order to protect the smaller banks and financial institutions from becoming the target of money laundering.

5.3 Limitation of the Study

One of the limitations of the study is the challenge to receive feedbacks from respondent for the survey questionnaires. From 180 questionnaires sent only 101 respondents participated. The questionnaires can only be answered by a specific group that is for the people working in the banks and other financial institutions in Malaysia. Trade based money laundering is a complex and new methodology so there is only a small number of research available for references.

As the research was done during the Covid 19 pandemic, most of the initial plan needs to be amended and change due to the Movement Control Order imposed by the government such as

the initial plan to gather feedback from participants through face to face interview. 100% feedback can only be gathered through the online platform. Hence if other methods can be done I am sure the finding of the result will resulted in a more reliable outcome.

Time constraint is also one of the factor that limit the outcome of the research as the project paper need to be submitted on the given due date. More time will lead to a better research done for this project.

5.4 Recommendation for Future Research

Trade Based Money Laundering is a new technique and the most widely used method to launder money. It is very complex and the most misunderstood. TBML is a large topic and there are a lot of opportunity for further research. As time passes by, there will be more data available. Future research can be done on the strategy to determine the best way to identify the TBML activity globally. A review on identifying a more possible way that the banking institution could use to collect customer data to identify TBML activity. More detailed research could be conducted to find the best way to reduce the risk of serving customers who are believe to be involved in this illegal activity.

Future researcher can look into various other methods of expansion for the research. Dependant variable and independent variables can be discovered with various indicator that ng, is not permitted. can be gathered from past and future research.

There are several areas of research that can be done such as:-

- 1. A research on the identified TBML patterns and the link with money laundering activity
- 2. A detail research on how risk assessment is being used in specific banks

Future research is needed on TBML risk assessment to provide more information on the gaps that appear in the banking system.

5.5 Conclusion

TBML is a complex form of laundering and it is more than just mis-invoicing or for tax evasion but it also involves shipments, international purchases and international transfer of value. In order to detect this activity, it requires co-operation from several agencies such as the custom department.

Several financial crimes including trade based money laundering continue to be one of the challenges to the banking sector globally. The traditional approach used by banks in determining the source of funds in the client's account is now facing stronger inspection by regulators around the world. A number of issues are beginning to influence the changes in how money laundering risk will affect the banking sector. These influences include the competencies of the frontline officer, the IT capabilities infrastructure, the effectiveness of the compliance department and the efficiency of the regulatory requirement.

In response new proposals for increase regulations are being suggested from the awareness of weaknesses that has been identified from the research. This research aims to contribute to the increase in the level of awareness on trade based money laundering which focus specifically on the effect of this crime to the financial institution particularly the banks.

Through the research it has also been discovered that TBML works alongside other money laundering activity and many financial criminals will mix methods based on whatever barriers available. This has implications on how risk assessment are being set up, including the needs to improve internal communication within the organizations. Improvements are also needed in the internal communication system among different units within the banks which also involve the front office, internal audit and etc.

It is hoped that this research can offer new insights into trade based money laundering and the risk assessment challenges towards banks in Malaysia.

REFERENCES

- Advantage, C. (2020). Trade Based Money Laundering.
- AMLA. (2001). The Anti Money Laundering Anti Terrorism and Proceeds of Unlawful Act 2001.
- AUSTRAC. (2013). Typologies and Case Study Report.
- Baldwin. (2003). The new face of money laundering. *Journal of Investment Compliance*, 38-41.
- Cassara, J. A. (2015). Trade based money laundering. In J. A. Cassara, *Trade Based Money Laundering*. John Wiley and Sons Inc.
- Country, K. Y. (2017). Anti money laundering in Malaysia.
- Dhillon G Rusniah, A. a. (2013). The viability of enforcement mechanisms under money laundering and anti terrorism offences in Malaysia. *Journal of Money Laundering Control*.
- Elise Whitely, e. (2002). Statistic review 4 : Sample size calculations.
- Fasolo, M. A. (2008). Behavioural decision theory for multi criteria decision analysis: A guided tour. *Journal of the Operational Research Societ*.
- FATF. (n.d.). fatf-gafi.org. Retrieved from FATF.
- Favarel-Garrigues, e. (2007). Sentinels in the banking industry; Private actors and the fight against money laundering in France. *British Journal of Criminology*, 1-19.
- Harding, N. (2009). Improving assessments of another auditor's competence, auditing: A Journal of Practice & Theory.
 INCSR. (2020). International Narcotics Control Strategy Report Volume II Money
- INCSR. (2020). International Narcotics Control Strategy Report Volume II Money Laundering.
- Irwin, e. (2011). An Analysis of money laundering and terrorism financing typologies. *Journal of Money Laundering Control*, 311-330.
- Jamaliah Said et, a. (2013). Money Laundering Prevention Measures among Commercial Banks in Malaysia.
- Johnson, J. (2001). In Pursuit of Dirty Money: Identifying Weaknesses in the GLobal Financial System. *Journal of Money Laundering Control*.
- Kar, D. &. (2012). Illicit Financial Flow From China and The Role of Trade Misinvoicing Global Financial Integrity.
- Kehoe, M. (2021). The Threat of Money Laundering.
- Kehoe, M. (n.d.). *The Threat of Money Laundering*. Retrieved from tcd.ie/economics/assets/pdf/SER/1996/Mark Kehoe html

- KPMG. (2014). Global Anti Money Laundering Survey.
- Lowe, D. W. (2002). The effects of decision -aid use and reliability on jurors evaluation of auditors liability.
- Malaysia., B. N. (2021, 30th January). *AML/CFT*. Retrieved from amlcft.bnm.gov.my.
- Mauro, J. (2014). The New Economy in Financial Crimes.
- Mc Carthy, K. S. (2014). Modelling the money launderer: Micro Theoretical on anti money laundering policy,.
- Mclaughin, J. P. (2013). The use of customer due diligence to combat money laundering. Accounting Business and Public Interest.
- Naheem, M. A. (2017). Trade based money laundering: Exploring the implications for international banks.
- Raghavan. (2006). Intergrating anti-money laundering into the compliance structure. Bank Accounting and Finance.
- Reuter, e. a. (2004). Chasing dirty money: The fight against money laundering.
- Simser. (2012). Money Laundering: Predicate crimes, laundering techniques and the AML response.
- Trochim, P. W. (2021). Research Method Knowledge Base.
- UNODC. (2011). Estimating Illicit financial flow s resulting from drug trafficking and other transnational organized crime.
- Walker, J. A. (2009). Measuring global money laundering: The walker gravity model. is not permitted. Review of Law & Economics. 821-853.
- Wikepedia. (n.d.). Financial Action Task Force.
- Wit, J. (2007). A risk based approach to AML: A controversy between financial institutions and regulators. 156-165.
- Yusarina Mat Isa, Z. M. (2015). Money laundering risk: From the Bankers' and Regulator's Perspectives.
- Zuraidah Mohd Sanusi, e. (2016). Investigations and charges of money laundering cases under AMLATFA. International Journal of Economics and Management.

APPENDICES UNIVERSITY TUN ABDUL RAZAM



Assalamualaikum WBT & Greetings

Dear Respondent,

I am a post graduate student from University Tun Abdul Razak, Kuala Lumpur, Malaysia. If you could spare a few minutes of your time to answer the attached questionnaires, it would be much appreciated. The questionnaires have some statement with available answer choices. There is no right or wrong answers. Only your personal opinion matters. The information acquired from these questionnaires are confidential and for academic research purposes only.

Please mark your answers by ticking (v) only one choice of each statement. This study would like to draw conclusions from your approaches and opinion on THE EFFECT OF TRADE BASED MONEY LAUNDERING ON THE RISK ASSESSMENT OF BANKING SECTOR IN MALAYSIA.

The information provided remains strictly confidential and is safeguarded in accordance with the Malaysian Personal Data Protection Act 2010 (PDPA). Your reply is important to the success of the study. Thank you for your co-operation. 10 u reprinting, is not permitted.

Yours Sincerely

ZETTY YUSNITA BINTI ABDUL JALIL

MBA Majoring in Finance

Universiti Tun Abdul Razak (UNIRAZAK)

Kuala Lumpur

SECTION A



MBA MAJORING IN FINANCE

THE EFFECT OF TRADE BASED MONEY LAUNDERING ON THE RISK ASSESSMENT OF BANKING SECTOR IN MALAYSIA.

(i) Please circle on the appropriate answer

No	Description	Answer
1.	Gender	A. Male
	.0///.	B. Female
	$U_{N_{I}}$	
2.	Age Copy	A. 18-30
	INDS IN SIT	B. 31-45
	Odifyin	C. 46-60
	ng, or	D. Above 60
	repring	DD//
3.	Educational qualification	A. Secondary or below
		B. Higher Secondary
		C. Bachelor's Degree
		D. Post graduate degree or higher

(ii) Please mark your answers by ticking (V) only one choice for each statement

Strongly Disagree 5

Disagree 4

Neutral 3

Agree 2

Strongly Agree 1

1	Impediments to Trade Based Money	5	4	3	2	1
	Laundering (TBML) detection					
	Inexperience in TBML by front office staff					
	Lack of training in TBML					
	Lack of communication on TBML to					
	management					
	Lack of resources					
	No link with internal audit					
		1	l		l	•
_		_	_	_	_	
2	How aware are senior management about	5	4	3	2	1
	TBML within your organization?					
	Know the basic					
	Aware through audit committee					
	Have a good practice awareness and actively					
	seek further knowledge					
	Very aware and practice in implementing					
	new approaches					
	Not aware at all					
3	Define the nature of the relationship	5	4	3	2	1
3	between internal audit and TBML		7		_	_
	compliance within your organisation					
	Some level of co-operation					
	Seeking to develop a more coordinated audit					
	plan	A				
	A limited working relationship					
	Strong working relationship					
	No link at all	8011				
	No mik de dii	20.	D. 4			
		ng, is not	SPI			
4	Is TBML compliance firmly embedded in	5	Derra	1 3	2	1
	your organization?		"Ite	0/		
	No progress is being made					
	Most part of the organization					
	At least half the organization					
	All are very aware and proactive in					
	implementing new approaches					
	Definitely not					
5	Improvement that are needed	5	4	3	2	1
3	improvement that are needed	3	4	3		_
	Additional training on TBML officers					
	More communication on TBML across the					
	organization					
-	More training for front office staff					
	Internal audit more involved			1		
				-		
	Stronger communication to management	<u> </u>				

SECTION B

Please mark your answers by ticking (V) only one choice for each statement

Strongly Disagree 5

Disagree 4

Neutral 3

Agree 2

Strongly Agree 1

TBML – trade based money laundering AML – Anti Money Laundering

No.	Statement Research Variable	5	4	3	2	1
Α	COMPETENCIES OF FRONTLINE OFFICER					
1.	TBML is a new concept for banking sector					
2.	Front office staff is the key person to					
	detect TBML					
3.	Training and greater awareness are					
	important factors in combating TBML					
4.	Banks should be taking on a stronger					
	investigate role into client behavior,					
	beneficial ownership and transaction					
5.	details The need to raise awareness of the risk	A				
5.	that TBML poses among staff		> .			
В	IT CAPABILITIES INFRASTRUCTURE					
В	THE CAPABILITIES INFRASTRUCTURE	ABDI				
1.	The use of International Trade Alerts	ing, is no	RA-			
	Software	13/10	1	AL		
2.	Use of analytic tools such as iDetect		Nermit	''		
3.	Audit access to treasury system			30'		
4.	Invest in software to compare trade prices.					
5.	Lack of integrated detection system.					
С	DEPARTMENT					
1.	TBML risk compliance is a step too far for					
	banks as many appear to be struggling to					
	cope with the average AML compliance					
2.	Internal Audit plays a role in TBML risk					
	assessment					
3.	Compliance Dept should audit suspicious					
	activity reports and follow the trail to					
	access the effectiveness of the risk					
4	assessment tools					
4.	Jointly develop the risk assessment approach alongside AML and management					
5.	Increase prosecution for TBML crimes					
٦.	micrease prosecution for Tolvic Crimes					

No	Statement Research Variable	5	4	3	2	1
D.	EFFICIENCY OF THE REGULATORY REQUIREMENT					
1.	Senior management acknowledge that TBML is a risk					
2,	Firmly embed TBML awareness culture across organisation					
3.	Strengthening knowledge flow at international level amongst peers					
4.	Clear TBML policies understood and developed at top management					
5.	Head office develop a specific TBML cell					



APPENDIX B – SPSS DATA OUTPUT

Descriptives

	Descriptives		Statistic	Std. Error
QA4ii_lack training	Mean		2.01	.106
QA4II_lack trailling	95% Confidence Interval for	Lower Bound	1.80	.100
	Mean	Upper Bound	2.22	
	5% Trimmed Mean	оррег воина	1.91	
	Median		2.00	
	Variance		1.130	
	Std. Deviation		1.063	
	Minimum		1.003	
	Maximum		5	
			4	
	Range			
	Interquartile Range		1 000	0.40
	Skewness		1.203	.240
O \ 4'''	Kurtosis		.994	.476
QA4iii_communication	Mean		2.16	.108
,	95% Confidence Interval for	Lower Bound	1.94	
	Mean	Upper Bound	2.37	
Copy	5% Trimmed Mean	4	2.08	
	Median		2.00	
	Variance in A	BDUL RAZ	1.175	
	Std. Deviation	300/	1.084	
	Minimum	is not MAZ	4/4	
	Maximum	Permit	5	
	Range	***((90/ 4	
	interquartile Kange		1	
	Skewness		1.072	.240
	Kurtosis		.459	.476
QB9ii_Frontoffice	Mean		1.55	.078
	95% Confidence Interval for	Lower Bound	1.40	
	Mean	Upper Bound	1.71	
	5% Trimmed Mean		1.45	
	Median		1.00	
	Variance		.610	
	Std. Deviation		.781	
	Minimum		1	
	Maximum		5	
	Range		4	
	Interquartile Range		1	

	Skewness	2.131	.240
	Kurtosis	6.557	.476
QA4v_link	Mean	2.51	.110
	95% Confidence Interval for Lower Bo	ound 2.30	
	Mean Upper Bo	ound 2.73	
	5% Trimmed Mean	2.46	
	Median	2.00	
	Variance	1.232	
	Std. Deviation	1.110	
	Minimum	1	
	Maximum	5	
	Range	4	
	Interquartile Range	1	
	Skewness	.655	.240
	Kurtosis	366	.476
QB11ii_Auditrole	Mean	1.77	.072
_	95% Confidence Interval for Lower Bo	ound 1.63	
	Mean Upper Bo		
	5% Trimmed Mean	1.70	
	Median	2.00	
C ₀ 0)			
	Variance Std. Deviation Minimum Maximum Range Interquartile Range Skewness	.719	
	Minimum 9.0c AB	4/-1	
	Maximum Printi	5	
	Range Range	R4> 4	
	Interquartile Range	Permi 1	
	Skewness	1.686	.240
	Kurtosis	6.447	.476
QA4i_Inexperiance	Mean	1.93	.107
,	95% Confidence Interval for Lower Bo		
	Mean Upper Bo		
	5% Trimmed Mean	1.82	
	Median	2.00	
	Variance	1.165	
	Std. Deviation	1.079	
	Minimum	1	
	Maximum	5	
	Range	4	
	Interquartile Range	1	
		1.259	.240
	Skewness		

QB12ii_TBMLawareness	Mean		1.83	.076
<u>-</u>		Lower Bound	1.68	1010
	Mean	Upper Bound	1.98	
	5% Trimmed Mean		1.76	
	Median		2.00	
	Variance		.581	
	Std. Deviation		.762	
	Minimum		1	
	Maximum		5	
	Range		4	
	Interquartile Range		1	
	Skewness		1.538	.240
	Kurtosis		4.825	.476
QA6iv_Strong	Mean		2.58	.072
_ 0	95% Confidence Interval for	Lower Bound	2.44	
	Mean	Upper Bound	2.73	
	5% Trimmed Mean		2.57	
	Median		3.00	
	Variance		.525	
	Std. Deviation		.725	
Copyi	Minimum	1	1	
	Maximum	BOUL RAZ	5	
	Range A		4	
	Interquartile Range	DUI	1	
	Skewness	lis no RAZ	.343	.240
	Kurtosis	Permin	1.439	.476
QB12i_acknowledge	Mean	BDUL RAZ	1.86	.077
	95% Confidence Interval for	Lower Bound	1.71	
	Mean	Upper Bound	2.01	
	5% Trimmed Mean		1.77	
	Median		2.00	
	Variance		.601	
	Std. Deviation		.775	
	Minimum		1	
	Maximum		5	
	Range		4	
	Interquartile Range		1	
	Skewness		1.693	.240
	Kurtosis		5.088	.476
QA4iv_resources	Mean		2.37	.101

95% Confidence Interval for	Lower Bound	2.17	
Mean	Upper Bound	2.57	
5% Trimmed Mean		2.31	
Median		2.00	
Variance		1.034	
Std. Deviation		1.017	
Minimum		1	
Maximum		5	
Range		4	
Interquartile Range		1	
Skewness		.837	.240
Kurtosis		.255	.476

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
QA4ii_lack training	.296	101	.000	.796	101	.000
QA4iii_communication	.340	101	.000	.793	101	.000
QB9ii_Frontoffice	.316	101	.000	.658	101	.000
QA4v_link	292	101	.000	.864	101	.000
QB11ii_Auditrole	.306	9, or ₁₀₁	48.000	.692	101	.000
QA4i_Inexperiance	.266	101	ting .000	.784	101	.000
QB12ii_TBMLawareness	.314	101	.000	.727	101	.000
QA6iv_Strong	.281	101	.000	,806 1777/,806	101	.000
QB12i_acknowledge	.350	101	.000	.688	101	.000
QA4iv_resources	.314	101	.000	.844	101	.000

a. Lilliefors Significance Correction

Descriptive Statistics

	Mean	Std. Deviation	N
QA4i_Inexperiance	1.93	1.079	101
QB9ii Frontoffice	1.55	.781	101

Correlations

		QA4i_Inexperian	QB9ii_Frontoffic
		се	е
QA4i_Inexperiance	Pearson Correlation	1	.414**
	Sig. (2-tailed)		.000
	N	101	101
QB9ii_Frontoffice	Pearson Correlation	.414**	1
	Sig. (2-tailed)	.000	
	N	101	101

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Correlations

	UNI		QA4i_Inexperian	QB9ii_Frontoffic
	CODI		ce	е
Spearman's rho	QA4i_Inexperiance	Correlation Coefficient	1.000	.296**
	" Yin	Sig. (2-tailed)	1	.003
		N Febria	101	101
	QB9ii_Frontoffice	Correlation Coefficient	.296**	1.000
		Sig. (2-tailed)	.003	
		N	mitted 101	101

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Descriptive Statistics

	Mean	Std. Deviation	N
QA4v_link	2.51	1.110	101
QB11ii_Auditrole	1.77	.719	101

Correlations

			QB11ii_Auditrol
		QA4v_link	е
QA4v_link	Pearson Correlation	1	.223*
	Sig. (2-tailed)		.025

	N	101	101
QB11ii_Auditrole	Pearson Correlation	.223*	1
	Sig. (2-tailed)	.025	
	N	101	101

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Correlations

		oon oldhono		
				QB11ii_Auditrol
			QA4v_link	е
Spearman's rho	QA4v_link	Correlation Coefficient	1.000	.131
		Sig. (2-tailed)		.190
		N	101	101
	QB11ii_Auditrole	Correlation Coefficient	.131	1.000
		Sig. (2-tailed)	.190	
		N	101	101

Descriptive Statistics

	Mean	Std. Deviation	N
QA6iv_Strong	2.58	.725	101
QB12ii_TBMLawareness	1.83	.762	101
	Wing	VA	
		" Or repri	Diri
	Corr	elations 9	RA
	33	3,	is not po QB
			, 06 GB

		QA6iv_Strong	wareness
QA6iv_Strong	Pearson Correlation	1	.433**
	Sig. (2-tailed)		.000
	N	101	101
QB12ii_TBMLawareness	Pearson Correlation	.433**	1
	Sig. (2-tailed)	.000	
	N	101	101

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Correlations

				QB12ii_TBMLa
			QA6iv_Strong	wareness
Spearman's rho	QA6iv_Strong	Correlation Coefficient	1.000	.269**
		Sig. (2-tailed)		.007
		N	101	101

QB12ii_TBMLawareness	Correlation Coefficient	.269**	1.000
	Sig. (2-tailed)	.007	
	N	101	101

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Descriptive Statistics

	Mean	Std. Deviation	N
QA4iv_resources	2.37	1.017	101
QB10iv_Invest	1.86	.762	101

Correlations

QA4iv resource

		QA-IV_resource	
		S	QB10iv_Invest
QA4iv_resources	Pearson Correlation	1	.427**
	Sig. (2-tailed)		.000
	N	101	101
QB10iv_Invest	Pearson Correlation	.427**	1
	Sig. (2-tailed)	.000	
	CNOVINERO	101	101

^{**.} Correlation is significant at the 0.01 level (2-tailed)

Correlations

QA4iv_resource

			11/1/80	QB10iv_Invest
Spearman's rho	QA4iv_resources	Correlation Coefficient	1.000	.347**
		Sig. (2-tailed)		.000
		N	101	101
	QB10iv_Invest	Correlation Coefficient	.347**	1.000
		Sig. (2-tailed)	.000	
		N	101	101

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Model Summary^b

1	.419 ^a	.175	.150	.720
Model	R	R Square	Square	Estimate
			Adjusted R	Std. Error of the

a. Predictors: (Constant), QA4v_link , QA4i_Inexperiance, QA4ii_lack training

b. Dependent Variable: QB9ii_Frontoffice

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.689	3	3.563	6.876	.000 ^b
	Residual	50.262	97	.518		
	Total	60.950	100			

a. Dependent Variable: QB9ii_Frontoffice

b. Predictors: (Constant), QA4v_link , QA4i_Inexperiance, QA4ii_lack training



APPROVAL PAGE

TITLE OF PROJECT PAPER:	THE	EFFECT	OF	TRADE	BASED	MONEY
	LAUN	NDERING (ON T	HE RISK	ASSESSN	MENT OF
	BANE	KING SECT	TOR 1	IN MALAY	YSIA	

NAME OF AUTHOR : ZETTY YUSNITA BINTI ABDUL JALIL

The undersigned certify that the above candidate has fulfilled the condition of the project paper prepared in partial fulfillment for the degree of Master of Business Administration.

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