# DEPOSITORS' WITHDRAWAL BEHAVIOR IN ISLAMIC BANKING: A CASE STUDY OF MALAYSIA

BY

## **MUHAMAD ABDUH**

A dissertation submitted in fulfilment of the requirement for the degree of Doctor of Philosophy in Business Administration

Kulliyah of Economics and Management Sciences

International Islamic University Malaysia

JANUARY 2012

#### **ABSTRACT**

The present research is structured into three parts; (i) Islamic bank selection criteria; (ii) factors influence withdrawal behavior and (iii) the impact of banking crisis and macroeconomic variables' shock towards the fluctuation of Islamic banks' total deposit. The study attempts to enrich the understanding of withdrawal behavior of Islamic banking depositors in Malaysia utilizing different statistical approaches. Firstly, the research utilizes the Analytic Hierarchical Process (AHP) to delineate the most influencing factors that have the propensity to lead depositors to patronize Islamic banks. It was revealed that shariah compliance, profitability, and bank's reputation are the most influencing factors. This suggests that violation of these factors can lead depositors to withdraw their money. Secondly, the research attempts to investigate the depositors' withdrawal behavior from characteristics and psychological perspectives. To do this, six binary logistic regression models (logit) were developed and the theory of reasoned action (TRA) was also utilized. For logit models, thirteen independent variables and three dependent variables were incorporated for two different groups of depositors i.e. single account holders and multiple account holders. It was revealed that for all six models developed, the variable "main reasons" (X11, X12, and X13) were at all times found to be significant and the relationships were always as theorized. For instance, in terms of model 1, regardless of the group of depositors, the model consistently showed that depositors whose main reason in patronizing Islamic bank is "shariah compliance" will have higher propensity to withdraw their funds when it comes to their knowledge that their bank violates shariah principles. Other variables also appeared to significantly affect withdrawal behavior such as type of account, total amount of money deposited, awareness upon deposit insurance, type of bank, and ownership of the bank. Through structural equation modeling (SEM), good-fit indices from the TRA model also led to predicting the withdrawal behavior of depositors, whereby subjective norm plays a significant role in influencing the depositors' withdrawal intention. The last part of the research examined the influence of macroeconomic performance towards the total deposit in Islamic banks, using vector error correction model (VECM). This part incorporates data span of ten years (i.e. January 2000 to December 2010) and uses variables such as Bank Negara policy rate (BLR), inflation, production index, interest rate, mudharabah deposit rate, and the crisis event. It was revealed that inflation, growth, rate of return have significant impacts upon total deposit fluctuations of Islamic banks in the long run. Also, the positive relationship of banking crisis event in the long run and in the short run showed that the general sentiments of depositors play important roles in depositors' saving behavior and eventually can cause funds flow into Islamic banks during the banking crisis.

## خلاصة البحث

هذه الدراسة تتكون من ثلاثة أجزاء وهي: أولا: معابير إختيار البنك الإسلامي من قبل الموديعين. ثانيا: العوامل التي تؤثر على سلوك سحب المال. وأخيرا: أثر أزمات البنوك وأزمات متغيرات الاقتصاد الكلى على تذبذب مجموع إيداعات البنوك الإسلامية الغرض من هذه الأجزاء الثلاثة هو تقديم نظرة ثاقبة على سلوك سحب المال لدى الموديعين في البنوك الاسلامية في ماليزيا من منطلقات بحثية آخرى، وهي كالتالي: أولا: هذا البحث يستُخدم عملية التحليل الهرمي للكشف عن أكثر العوامل تأثيرا على الموديعين في اختيارهم للبنوك الإسلامية. هذه الدراسة توصلت إلى أن استيفاء المعابير الشرعية، فالربحية، ثم شهرة البنك هي أهم العوامل المؤثرة على قرارهم، وبناء عليه فإن القصور في هذه المعابير سيؤدي بهم إلى سحب أمو الهم من البنوك. ثانيا: هذه الدر اسة تحاول أن تدرس سلوك سحب المال من وجهة نظر علم النفس وكذلك الخصائص النفسية. لأجل هذا الغرض، تم تطوير ستة معادلات إنحدار لوجستي منطقي، واستخدم أيضا نظرية مسببات القرار. فيما يخص معادلات الانحدار اللوجستي، تم دمج ثلاثة عشر متغير مستقل وثلاثة متغيرات تابعة لدراسة مجموعتين مختلفة من الموديعين، وهم أصحاب الحساب الواحد وأصحاب الحسابات المتعددة. من المثير للإهتمام أن المتغيرات س 11 و س 12 وس 13 في جميع المعادلات الست كانت ذات دلالة واضحة وكذلك العلاقة كانت حسب المتوقع. على سبيل المثال في المعادلة الأولى وبغض النظر عن المجموعة، فإنها دائما تشير إلى أن: جميع من يقول بأنه يختار البنك بسبب كونه متوافقا مع معابير الشريعة هم نفسهم لديهم إحتمالية عالية جدا لسحب أموالهم من البنوك التي تخالف المباديء الشرعية. أيضا هناك عوامل أخرى كانت لها دور في التأثير على سلوك سحب المال على سبيل المثال نوع الحساب ومقدار المبلغ المودع والوعى بالتأمين على الإيداعات ونوع البنك وملكية البنك في الوقت نفسه، ومن خلال نموذج المعادلات المهيكلة، أثبتت نظرية مسببات القرار أن سلوك سحب المال بالإضافة إلى المعيار الذاتي تلعب دور مهم جدا في التأثير على نية سحب المال في المقام الأول. الجزء الأخير من هذه الدراسة يختبر تأثير أداء الاقتصاد الكلى على إجمالي إيداعات البنوك الإسلامية وذلك بإستخدام طريقة النموذج الموجة لتصحيح الأخطاء. هذا الجزء يدمج البيانات ابتداء من يناير من عام 2000 وحتى ديسمبر من عام 2010، ويستخدم متغيرات مثل معدل البنك المركزي الماليزي، التضخم، دليل الصناعة، معدل الفائدة، معدل إيداعات المرابحة، وأيضا الانهيارات الاقتصادية. كما كان متوقعا، فإن التضخم، ومعدل نمو العائدات أثرت على التذبذب في مجموع الإيداعات في البنوك الاسلامية على المدى الطويل، في ذات الوقت فإن هناك علاقة طردية بين إنهيارات البنوك ومجموع الإيداعات على المدى الطويل والقصير، والذي تظهر أن شعور الموديعين وتخوفهم يلعب دورا مهما في سلوك إمساك المال والإبقاء عليه، والذي بدوره سوف يؤدي إلى تدفق الأموال إلى البنوك الأسلامية خلال أز مات البنوك

## APPROVAL PAGE

The thesis of Muhamad Ab	oduh has been approved by the follo	owing:
_	Mohd Azmi Omar Supervisor	
_	Jarita Duasa	
	Co-supervisor	
_	Moussa Larbani Internal Examiner	
_	Shahida Shahimi	
	External Examiner	
_	Abdi Omar Shuriye Chairman	

## **DECLARATION**

I hereby declare that this dissertation is the result of my own investigations, except

where otherwise stated. I also declare that it has not been	n previously or concurrently	
submitted as a whole for any other degree at IIUM or other institutions.		
Muhamad Abduh		
Signature	Date	

## INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

## DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESEARCH

Copyright © 2012 by International Islamic University Malaysia. All rights reserved.

## DEPOSITORS' WITHDRAWAL BEHAVIOR IN ISLAMIC BANKING: A CASE STUDY OF MALAYSIA

I hereby affirm that The International Islamic University Malaysia (IIUM) holds all rights in the copyright of this work and henceforth any reproduction or use in any form or by means whatsoever is prohibited without the written consent of IIUM. No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder.

ned by Muhamad Abduh	
Signature	Date

To

My beloved Mother (Djumaesih)

My beloved Father (Almarhum Suharto)

My beloved Wife (Witrie Annisa Buys)

My beloved Children (Naila Abduh, Fahmi M Abduh, Maryam Abduh and Aishah Abduh)

#### **ACKNOWLEDGEMENTS**

Alhamdulillahi rabbil 'alamin, all praise be to Allah SWT for giving me the strength and determination to complete this thesis.

I would like to take this opportunity to express my very sincere gratitude to my Guru and supervisors, Professor Dato' Dr. Mohd Azmi Omar and Associate Professor Dr. Jarita Duasa for their continuous guidance, valuable advices, constructive comments and suggestions.

I am also indebted to my family especially my mother for the love and du'a for me, my wife and children for their love, patience and understanding. No words are adequate to express my deepest appreciation to my beloved mother and wife for their never ending love, continuous encouragement and moral support during all these years.

Throughout my journey as a postgraduate student at the International Islamic University Malaysia, I have so many friends who are very helpful through the discussions conducted, events attended together and stories had been shared. Thank you to all of you, especially for Naail Kamil, Mohammed Al-Haddar, Daul, Fany, Nafiu, Ghani, Asmy, Fouad, Asif, Taher Jan, Adamu, Tika, Yusuf and Oladapo for the nice journey and memorable events. Insya Allah, all of you will always remain fresh in my mind.

## TABLE OF CONTENTS

Abstract		ii
Abstract in Arabic		iii
Approval Page		iv
Declaration Page.		V
_		
Dedication		vii
	ts	
List of Tables		Xiii
List of Figures		XV
CHAPTER 1: IN	TRODUCTION	1
	ction	
	ound of the Study	
	Research Framework	
	of the Study	
	ch Questions	
	ch Objectives	
	ew of Research Methodology	
	oution of the Study	
	Contribution to the Body of Knowledge	
	Contribution to the Industry and Policy Make	
	zation of the Study	
CHAPTER 2: IS	LAMIC BANKING	15
	ction	
2.2 Histori	cal Background of Islamic Banking	16
	les and Basic Contracts in Islamic Banking	
	Principles of Islamic Banking	
2.3.2	Basic Contracts in Islamic Banking	24
	2.1 Mudharabah	
	2.2 Musharakah	
2.5	2.3 Murabahah	
	2.4 Salam and Istisna'	
	2.5 Wakalah	
	2.6 Wadiah	
	ecific Risks in Islamic Banking	
2.4.1	Shariah Risk	
2.4.2	Rate of Return Risk	
2.4.3	Fiduciary Risk	
2.4.4	Reputational Risk	
2.4.5	Displaced Commercial Risk	37

2.4.6 Withdrawal Risk	38
2.5 The Theoretical Framework of Withdrawal Risk	
2.6 Islamic Banking in Malaysia	42
2.6.1 1960 – 1990: Establishment of Islamic financial institution	ns 43
2.6.1.1 Tabung Haji	43
2.6.1.2 Bank Islam Malaysia Berhad	44
2.6.1.3 Syarikat Takaful Malaysia Berhad	45
2.6.2 1990 – 2000: Conventional banks were allowed to offer	
Islamic financial products and services under Islamic banking	
scheme	45
2.6.3 2000 – 2010: Islamic Subsidiaries and the International	
Integration of Islamic banking system	46
2.7 Deposit Insurance in Malaysian Banking System	49
2.8 Summary	50
CHAPTER 3: ISLAMIC BANK SELECTION CRITERIA	54
3.1 Introduction	54
3.2 Literature Review	54
3.3 Research Framework	60
3.4 Data and Sample	62
3.4.1 Data	62
3.4.2 Population and Sample	63
3.5 Method of Analysis: Analytic Hierarchy Process	65
3.5.1 Consistency Index and Ratio	69
3.5.1 Computing the Weights for Criteria	71
3.6 Results and Discussion	72
3.6.1 Demography of Respondents	72
3.6.1 Analytic Hierarchy Process	75
3.7 Summary	79
CHAPTER 4: DEPOSITOR'S WITHDRAWAL BEHAVIOR: A	
LOGISTIC REGRESSION MODEL	81
4.1 Introduction	81
4.2 Literature Review	
4.2.1 Depositor's Withdrawal Behavior in Conventional Bankir	ıg 82
4.2.2 Depositor's Withdrawal Behavior in Islamic Banking	
4.3 Research Framework	
4.4 Data and Variables	90
4.4.1 Data and Sample	90
4.4.2 Variables in the Analysis	
4.5 Method of Analysis: Logistic Regression	92
4.5.1 Model Specification	
4.5.2 Fitting the Logistic Regression Model	
4.5.3 Odds Ratio	96
4.6 Results and Discussion.	
4.6.1 Demography of Respondents	
4.6.2 General Factors Affecting Withdrawal Behavior	99

4.6.3	Logit Model for Withdrawal Behavior: Single Account	
Hold	er	100
4.	6.3.1 Model 1: Shariah non-compliance	101
4.	6.3.2 Model 2: Uncompetitive Rate of Return	105
4.	6.3.3 Model 3: Rumor about Banking Crisis	107
4.6.4 Le	ogit Model for Withdrawal Behavior: Multiple Account Holde	er 108
4.	6.4.1 Model 1: Shariah non-compliance	109
4.	6.4.2 Model 2: Uncompetitive Rate of Return	113
4.	6.4.3 Model 3: Rumor about Banking Crisis	114
4.7 Sumn	nary	116
CHAPTER 5:	APPLYING THEORY OF REASONED ACTIO	N ON
	WITHDRAWAL BEHAVIOR: A STRUCTURAL EQU	
	luction	
	uture Review	
5.2 Litera 5.2.1		
5.2.2		
	TRA Application in Islamic Finance Casesrch Framework	
	and Variables	
5.4 Data 5 5.4.1		
5.4.2	1	
	od of Analysis: Structural Equation Modeling	
	ts and Discussion	
	Reliability Analysis	
5.6.3	Factor AnalysisSEM Model Fit Indices	
5.6.4 5.6.4		
5.7 Sumn	nary	133
INFLATION A IN ISLAMIC B	THE IMPACT OF GROWTH, RATE OF RE ND CRISIS ON DEPOSITORS' WITHDRAWAL BEH ANKING: A VEC MODEL	AVIOR 137
	luction	
	ture Review	
	Rate of Returns and Islamic Bank Deposits	
6.2.2	1	
6.2.3		
	theses Development	
	and Modeling	
6.4.1		
6.4.2	- F	
	od of Analysis	
6.5.1	<b>5</b>	
6.5.2	$\mathcal{E}$	
6.5.3	,	
6.6 Resul	ts and Discussion	149

6.6.1	Stationary Test	149
6.6.2	Cointegration Test	
6.6.3	Vector Error Correction Model (VECM)	150
6.7 Summa	ary	154
	SCUSSION AND CONCLUSION	
	action	
7.2 Recapi	tulation of Study	156
7.3 Summa	ary and Findings	158
7.3.1	Islamic Bank Selection Criteria	158
7.3.2	Factors Affecting Withdrawal Behavior: A Logit Model	159
7.3.3	A TRA Approach on Depositor's Withdrawal Behavior	161
	A VECM Model on Factors Affecting Islamic Banks	
Depos	sits	163
	Implications	
	tion and Suggestion for Future Study	
	Limitation	
7.5.2	Suggestion for Future Study	167
7.6 Conclu	ision	
BIBLIOGRAPH	Y	169
ADDENITIV I. Cu	rvey Questionnaire	101
	atistical Package Output for Chapter 3	
	statistical Package Output for Chapter 4	
	Statistical Package Output for Chapter 5	
APPENDIX V: Si	tatistical Package Output for Chapter 6	205

## LIST OF TABLES

Table No.		Page No.
2.1	Development of Islamic Banking and Finance in Modern History	18
2.2	Differences between Conventional Bank and Islamic Bank	23
2.3	Sources of fund of Bank Islam during its inception	44
2.4	Selected Islamic banking indicators in Malaysia	49
3.1	Tools of analysis been utilized in the area of bank selection criteria	56
3.2	Selected factors emerged in bank selection criteria from conventional and Islamic framework	59
3.3	Matrix 6x6 of AHP form used in this study	62
3.4	Pairwise comparison scale for Analytical Hierarchical Process preferences	67
3.5	Average random consistency index (RI)	69
3.6	Normalized pairwise rating of criteria	72
3.7	Demography of the Respondents	74
3.8	Aggregate Individual's Pairwise Matrix using Geometric Mean	77
3.9	Priority Vectors for all Criteria of the Decision Hierarchy	78
4.1	Types of Incidents which cause switching action between banks	83
4.2	Dependent Variables in Binary Logit Model	91
4.3	Independent Variables in Binary Logit Model	92
4.4	Demography of the Respondents	98
4.5	General Factors Affecting Withdrawal Behavior	100
4.6	Summary of Logit Model for Single Account Holders	102

4.7	Account Holders	105
4.8	Summary of Withdrawal Probability in Model 2 Single Account Holders	106
4.9	Summary of Withdrawal Probability in Model 3 Single Account Holders	109
4.10	Summary of Logit Model for Multiple Account Holders	110
4.11	Summary of Withdrawal Probability in Model 1 Multiple Account Holders	112
4.12	Summary of Withdrawal Probability in Model 2 Multiple Account Holders	114
4.13	Summary of Withdrawal Probability in Model 3 Multiple Account Holders	115
5.1	Model Fit Indices and the Cut-Off Value	127
5.2	Reliability Analysis	128
5.3	Factor Analysis	129
5.4	Goodness-of-fit Indices resulted from AMOS 16	130
5.5	Estimated Regression Coefficient	131
5.6	Coefficient Determination (R-square)	133
5.7	Mean for Responses in Every Items	134
6.1	Unit Root Test	149
6.2	Johansen and Julesius' Cointegration Test	150
6.3	Vector Error Correction Model	152

## LIST OF FIGURES

Figure No.		Page No
1.1	Shariah value propositions as driving force in Islamic finance	4
1.2	The Overall Research Framework	7
2.1	The Musammah contracts	25
2.2	The Mudharabah contract	27
2.3	The Musharakah contract	28
2.4	The Murabaha contract	31
2.5	Bay' al-Salam and Istisna' contract	32
2.6	The Framework of Withdrawal Risk	41
3.1	Framework of Islamic bank selection criteria	61
3.2	Sampling Technique	64
3.3	Pairwise Comparison Matrix	68
4.1	Framework of empirical survey on deposit withdrawal behavior in Islamic banking	90
5.1	The Framework of the Theory of Reasoned Action	119
5.2	Conceptual Model of Withdrawal Intention in Islamic Banking	123
5.3	AMOS 16 Output for The Model Tested in This Study	132

### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 INTRODUCTION

Risk management in financial institutions is one of the current financial issues, particularly during and after the 2007-2008 global financial crisis. It is also very important in relation to Islamic banking institutions, which are closely related to real economic activities, particularly in preventing bad impacts resulting from unfavorable conditions of real economic/business that may threat banks' performance.

Apart from the importance, however, studies on risk management in Islamic banks are still rare to date. Among the existing studies are researches on risk management framework in Islamic banking by Khan and Ahmed (2001), Ahmed (2002), Akkizidis and Khandelwal (2008), and Ismal (2009), surveys on the current practices of the overall risk management by Turren (1996), Al-Saati (2003) and Hassan (2009), shareholders risk of return by Rosly and Zaini (2008), credit risk management by Ahmed (2008) and Hassan (2009), displaced commercial risk by Kasri and Kassim (2009) and Zainol and Kassim (2010), liquidity risk by Ismal (2010; 2011), and currency risk by Obaidullah (1999).

In addition to the traditional risks conventional banks are facing, such as credit, interest, liquidity, and operational risks, Islamic banks, are also facing other typical risks relating to their *shariah*-based banking operations such as *shariah* risk, displaced commercial risk and withdrawal risk (Ahmed, 2002).

Deposit withdrawal risk is one of the most important risks to be managed by Islamic banks for some reasons, particularly those operating in dual banking system

countries. First, Islamic banks operate side by side with the conventional ones, which require them to perform well and be profitable for their depositors. Second, Islamic bank depositors expect Islamic banks to pay competitive returns and provide comprehensive banking services (rational behaviors). During the 1997-1998 and 2007-2008 global financial crisis, especially when conventional banks offered attractive returns, Islamic banks faced a dilemma as the increased interest rate caused rational Islamic banking depositors to have higher rate of return expectations from their Islamic banks. Such dilemma leads to a displaced commercial risk and finally to withdrawal risk. Third, unlike its conventional counterparts, Islamic banks are bound by Islamic principles that forbid them to take any interest-related incomes. This makes deposits from depositors an important source of funds for the operation and financing of Islamic banks. Therefore, the risk of fund withdrawal is another important aspect that should be well-managed in Islamic banking.

One way to anticipate withdrawal risk is by being able to identify the depositors' withdrawal behavior. This study, therefore, is aimed at analyzing depositors' withdrawal behavior in Malaysian Islamic banking industry. It is particularly focusing on the factors determining depositors' intention to withdraw their money from Islamic banks in the situation of receiving issue of *shariah* noncompliance products and practices, experiencing lower rate of return, and receiving rumors on banking crisis to occur in the near future. Individual and bank attributes, psychological factors, and macroeconomics variables will be utilized in order to have a good and best fitted model depicting withdrawal behavior of Islamic banks' depositors.

In addition, to get comprehensive information on depositors' withdrawal behavior, this study is also investigating the main reasons lying behind the depositors' willingness to initially deposit their money in the Islamic banks. Finally, this study attempts to propose recommendations for the Islamic banks and policy makers relating to how to identify depositors' withdrawal behavior and how to mitigate the deposit withdrawal risk.

#### 1.2 BACKGROUND OF THE STUDY

Islamic financial institution is the institution offering instruments and services compatible with the principles of Islam with the prohibition of *riba* —any unjustifiable increase of capital whether in loans or sale— as its central tenet of the system (see figure 1.1). It is a rapidly growing part of financial sector in the world today. Indeed, it is not restricted to Islamic countries and is spreading wherever there is a sizeable Muslim community.

Islamic banking assets have grown tremendously for over 30 years. The current global Islamic banking assets and assets under management have reached USD750 billion and is expected to hit USD1 trillion by 2010. There are over 300 Islamic financial institutions worldwide across 75 countries. According to the Asian Banker Research Group, The World's 100 largest Islamic banks have set an annual asset growth rate of 26.7% and the global Islamic Finance industry is experiencing average growth of 15-20% annually (McKinsey, 2008).

The most significant feature of Islamic banking is related to the types of products and services they offer. Various financial instruments developed by Islamic banks are based on two principles: the profit-loss sharing principle and the mark-up principle. The financial instruments based on the earlier principle include *mudarabah* (venture capital) and *musharakah* (partnership contract), while those based on the latter principle include *murabahah* (resale with pre-agreed profit), *bay'al-salam* 

(forward sale contract), *ijarah* (leasing) and *ijarah wa iqtina* (operating and financial lease). In order to remain competitive in the market, Islamic banks offer innovative products without violating *Shari'ah* (Islamic law) principles.

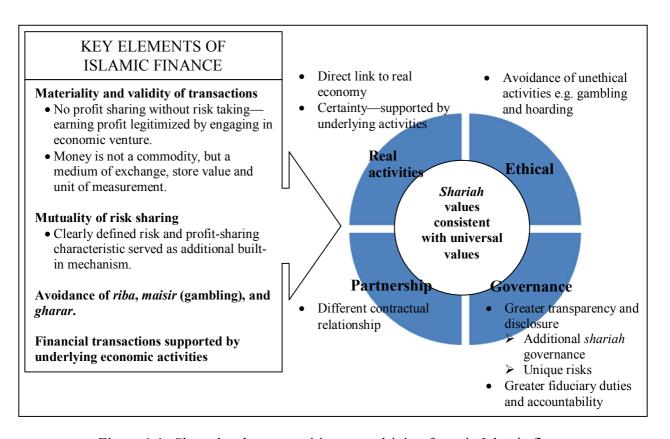


Figure 1.1: *Shariah* value propositions as a driving force in Islamic finance Source: (Islamic Finance Asia, Dec 2008/ Jan 2009)

Hassan (2009) argues that in view of those tenets, Islamic banks operate with many products that do not exist in conventional banks. These Islamic products bring many risks. Therefore, in the present day volatile environment, Islamic banks are facing a large number of risks such as credit risk, liquidity risk, foreign-exchange risk, market risk, interest rate risk, displaced commercial risk, and deposit withdrawal risk, etc. As the result, risk and risk factors may threaten Islamic banking industry's survival and success.

As Islamic finance has now become an integral part of the international financial system, it will be increasingly tested by developments, such as the international financial crisis. History has shown that the world will continue to be plagued by crises. While the triggering factors that precipitated financial crises have been different, for most, it resulted in a general loss of confidence from customers and a downward spiral in asset prices (Azis, 2008).

With regard to the loyalty of its customers, Islamic banks are over confident, believing that they have a captive market in Muslim countries and therefore somehow losing the non-Muslim potential customers interested in investing their assets in ethical financial institutions (Haniffa & Hudaib, 2007). On the other hand, it is commonly understood that Islamic banks are lacking of professionally managed risk identification process and risk management approaches, which lead Islamic banks involved in short-term loans instead of long-term equity finance (Hassan & Dicle, 2005).

Academic interest in the study of risk management of Islamic banking such as Turren (1996), Obaidullah (1999), Khan and Ahmed (2001), Ahmed (2002), Al-Saati (2003), Akkizidis and Khandelwal (2008), Rosly and Zaini (2008), Hassan (2009), Kasri and Kassim (2009), Zainol and Kassim (2010) and Ismal (2010) have argued that Islamic banks are not only facing the types of risks faced by conventional banks, but they also identified new and unique risks resulting from their unique asset classes and liability structures.

The key for the Islamic financial industry is to ensure that it will not be a source of financial instability and is able to achieve a level of resilience that will ensure its sustainability. In the context of savings mobilization, risk is a danger caused by an event or a loss that could impair the value of savings on deposit or substantially

affect the net worth of the institution. To keep Islamic banks and other financial intermediary institutions dedicated to capturing savings safe and sound, risk analysis and risk management are therefore necessary, particularly with regard to withdrawal risk. One of the best ways to mitigate withdrawal risk is to recognize the withdrawal behavior of the depositors. Hence, this study will be focused on recognizing withdrawal behavior by studying the factors affecting withdrawal behavior of Islamic bank depositors from the aspect of psychology, individual criteria and country's macroeconomic performances.

#### 1.3 THE OVERALL RESEARCH FRAMEWORK

This framework is expected to lead the research to have a better result for a new level of understanding about deposit withdrawal risk and to underpin a better performance of Islamic banks (see figure 1.2). Below are the overall research frameworks explaining the activities in this research:

- Islamic banks are exposed to risks similar to those of conventional banks.

  However, there are some risks that are uniquely faced by Islamic banks, such as *shariah* non-compliance risk and displaced commercial risk that may lead some groups of depositors to withdraw their deposit, which means a loss for the bank.
- 2. In order to have a comprehensive understanding on why depositors have intention to withdraw their money from their Islamic banks, the knowledge on what make them interested and become the Islamic banks' patrons is playing a significant role.

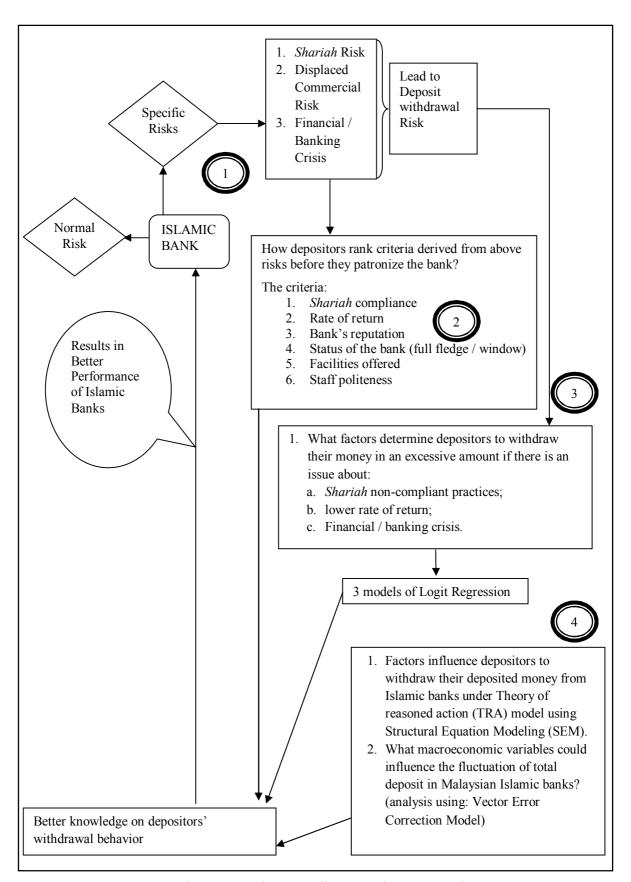


Figure 1.2: The Overall Research Framework

Based on the previous studies on factors affecting people to patronize Islamic banking, 6 factors are chosen to be included in the analysis. These factors are *shariah* compliance, rate of return, bank's reputation, status of the bank (full fledge or window), facilities offered, and staff politeness. The process of choosing the variables is discussed in chapter three.

Using Analytical Hierarchy Process (AHP) technique, this research attempts to show how depositors in Malaysia rank these factors based on their level of importance. This valuable information is believed to have a significant contribution towards the industry for their liquidity stability and the improvement in their customer satisfaction and service quality programs.

3. The three major causes of deposit withdrawal or early withdrawal of *mudharabah* deposits by depositors in Islamic banks are issues regarding *shariah* non-compliance (Ahmed, 2003; Abduh, 2011), lower rate of return (Ahmed, 2002). However, rumor on future banking crisis is also included in this study since Yada et al. (2009) found significant impact of this on deposit withdrawal in Japan under conventional framework.

By using binary logistic regression, this study attempts to uncover the individual attributes that can lead to deposit withdrawal should the three situations take place. The attributes included as independent variables in this analysis are:

> X1=Type of account

(1 = Has investment account, 0 = Has no investment account);

- > X2=Amount of money deposited
  - (1 = More than equal to RM 10 thousands, 0 = Less than RM 10 thousands);
- ➤ X3=Length of period of being Islamic bank customer

  (1 = More than equal to 3 years, 0 = Less than 3 years);
- $\triangleright$  X4=Work status (1 = Employee, 0 = Non-employee);
- $\triangleright$  X5=Using Internet banking (1 = Yes, 0 = No);
- $\triangleright$  X6=Bank status (1 = Full-fledged, 0 = Subsidiary);
- $\triangleright$  X7=Bank ownership (1 = Local, 0 = Foreign);
- $\triangleright$  X8=Do you have account in conventional bank? (1 = Yes, 0 = No);
- ➤ X9=If you have another account in a conventional bank, where you put your money most? (1 = Conventional, 0 = Islamic);
- $\triangleright$  X10=Do you aware about deposit insurance? (1 = Yes, 0 = No)
- ➤ X11=Competitive rate of return (1 = depositors put it as importance factor in before patronizing Islamic bank, 0 = otherwise);
- ➤ X12=Avoid bank interest (1 = depositors put it as importance factor in before patronizing Islamic bank, 0 = otherwise);
- ➤ X13=Less affected towards banking crisis (1 = depositors put it as importance factor before patronizing Islamic bank, 0 = otherwise)

## While the dependent variables are:

➤ Y1= Would you withdraw you money if your Islamic bank was found to be practicing *shariah* non-compliant products and services (1 = Yes, I will withdraw, 0 = No)