

DETERMINANTS OF MALAYSIAN ISLAMIC BANKS'  
PROFITABILITY: A COMPARATIVE STUDY  
BETWEEN WHOLESOME ISLAMIC BANKS AND  
ISLAMIC BANKING SUBSIDIARIES

BY

HASSAN ABDIKADIR HUSSEIN

A dissertation submitted in fulfilment of the requirement for  
the degree of Master of Science (Finance)

Kulliyyah of Economics and Management Sciences  
International Islamic University Malaysia

AUGUST 2020

## ABSTRACT

This study aims to examine the determinants of Islamic banking profitability in Malaysia by comparing between wholesome Islamic banking and Islamic banking subsidiaries. The factors that are affecting bank profitability are capital ratio, liquidity ratio, asset quality, cost-to-income ratio, bank size, concentration, GDP and inflation; while profitability is measured by ROA and ROE. This study develops a model to identify a set of bank-specific, industry and macroeconomic determinants of bank profitability for 16 Islamic banks in Malaysia from 2009 to 2017. Having analysed the data by using appropriate methods, several financial ratios have been adopted from the empirical literature on bank profitability. Using a static model specification, random effect and fixed effect model are used to run the regression model using STATA econometric software, but a generalized least square (GLS) equation is employed as a corrective measure to solve the problem. The findings show that the bank-specific, industry and macroeconomic variables have a significant effect on Islamic bank profitability in Malaysia. Based on a static model specification, empirical analysis shows that the wholesome Islamic banks are more profitable than Islamic banking subsidiaries. The results also show that the determinants' significance varies between wholesome Islamic banking and Islamic banking subsidiaries. The results reveal that the capital ratio, liquidity and inflation have statistical significance on profitability for Islamic banking subsidiaries while the capital ratio, liquidity ratio, asset quality, cost-to-income ratio, bank size and concentration have statistical significance on profitability for wholesome Islamic banking.

## خلاصة البحث

يهدف هذا البحث إلى فحص محددات الربحية المصرفية الإسلامية في ماليزيا من خلال المقارنة بين الخدمات المصرفية الإسلامية الكاملة والشركات التابعة للصيرفة الإسلامية، فالعوامل التي تؤثر على ربحية المصرف هي: نسبة رأس المال، ونسبة السيولة، وجودة الأصول، ونسبة التكلفة إلى الدخل، وحجم المصرف، والتركيز، والناتج المحلي الإجمالي، والتضخم؛ بينما تُقاس الربحية من خلال العائد على الأصول، والعائد على حقوق الملكية، ومن ثم؛ يطور هذا البحث نموذجًا لتحديد مجموعة من المحددات الخاصة بالمصرف، والصناعة، والاقتصاد الكلي لربحية المصارف لستة عشر مصرفًا إسلاميًا في ماليزيا ما بين عامي 2009-2017، وبعد تحليل البيانات باستخدام الأساليب المناسبة؛ اعتمد عدد من النسب المالية التجريبية دراسات عن ربحية المصرف، وباستخدام مواصفات النموذج الثابت؛ استُخدم نموذج التأثير العشوائي والتأثير الثابت لتشغيل نموذج الانحدار باستخدام برنامج STATA الاقتصادي القياسي، ولكن استُخدمت معادلة المربع الصغرى المعممة GLS إجراءً تصحيحيًا لحل المشكلة، وأظهرت النتائج أن للمتغيرات الخاصة بالمصرف والصناعة والاقتصاد الكلي؛ تأثيرًا بالغًا على ربحية المصارف الإسلامية في ماليزيا، وبناءً على مواصفات النموذج التأثير الثابت أظهر التحليل التجريبي أن المصارف الإسلامية الكاملة الأهلية تحقق أرباحًا أكثر من الشركات التابعة للصيرفة الإسلامية، كما أن أهمية المحددات تتفاوت بين الخدمات المصرفية الإسلامية السليمة والشركات التابعة للخدمات المصرفية الإسلامية، وبيّنت النتائج أيضًا أن لنسبة رأس المال والسيولة والتضخم؛ دلالة إحصائية على الربحية للشركات التابعة للخدمات المصرفية الإسلامية، في حين أن لنسبة رأس المال ونسبة السيولة وجودة الأصول ونسبة التكلفة إلى الدخل وحجم المصرف والتركيز؛ دلالة إحصائية على ربحية الخدمات المصرفية الإسلامية الكاملة والشركات التابعة للصيرفة الإسلامية.

## APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Science (Finance).

.....  
Farihana Binti Shahari  
Supervisor

.....  
Yusniliyana Binti Yusof  
Co-Supervisor

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Science (Finance).

.....  
Khairunisah Binti Ibrahim  
Examiner

.....  
Zulkufly Bin Ramly  
Examiner

This dissertation was submitted to the Department of Finance and is accepted as a fulfilment of the requirement for the degree of Master of Science (Finance).

.....  
Sharifah Raihan Syed Mohd Zain  
Head, Department of Finance

This dissertation was submitted to the Kulliyah of Economics and Management Sciences and is accepted as a fulfilment of the requirement for the degree of Master of Science (Finance).

.....  
Hassanuddeen Abdul Aziz  
Dean, Kulliyah of Economics  
and Management Sciences

## DECLARATION

I hereby declare that this dissertation is my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted for any other degrees at IIUM or other institutions.

Hassan Abdikadir Hussein

Signature.....

Date.....

## **COPYRIGHT**

### **INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA**

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

#### **DETERMINANTS OF MALAYSIAN ISLAMIC BANKS' PROFITABILITY: A COMPARATIVE STUDY BETWEEN WHOLESOME ISLAMIC BANKS AND ISLAMIC BANKING SUBSIDIARIES**

I declare that the copyright holder of this dissertation is jointly owned by the student and IIUM.

Copyright © 2020 Hassan Abdikadir Hussein and International Islamic University Malaysia. All rights reserved.

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below

1. Any material contained in or derived from this unpublished research may be used by others in their writing with due acknowledgement.
2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
3. The IIUM library will have the right to make, store in a retrieved system and supply copies of this unpublished research if requested by other universities and research libraries.

By signing this form, I acknowledged that I have read and understand the IIUM Intellectual Property Right and Commercialization policy.

Affirmed by Hassan Abdikadir Hussein

## DEDICATION

*I dedicate this dissertation to my beloved parents Jamala Mohamed Abdalla and Abdikadir Hussein for their love, prayers, supporting, understanding, and endurance for all my life.*

## **ACKNOWLEDGEMENTS**

All glory is due to Allah, the Almighty, whose Grace and Mercies have been with me throughout the duration of my programme. Although it has been tasking, His Mercies Blessings on me ease the herculean task of completing this research work.

I am most indebted to my supervisor, Dr: Farihana Binti Shahari whose enduring disposition, kindness, promptitude, thoroughness, and friendship have facilitated the successful completion of this work. I put on the record and appreciate her detailed comments, useful suggestions, and inspiring queries which have considerably improved this dissertation. Her brilliant grasp of the aim and content of this work has led to her insightful comments, suggestions, and queries that eventually helped me a great deal. The moral support she extended to me is in no doubt a boost that helped in building and writing the draft of this research work.

Lastly, I would also like to express my deepest appreciation to my mother, Jamala Mohamed Abdalla, my Father, Abdikadir Hussein, and all siblings for their prayers, moral support, and encouragement throughout my study.



# TABLE OF CONTENTS

Abstract .....	ii
Abstract in Arabic .....	iii
Approval Page.....	iii
Declaration .....	v
Copyright .....	vi
Dedication .....	vii
Acknowledgements .....	viii
List of Tables .....	xii
List of Figures .....	xiii
List of Abbreviations .....	xiv
<b>CHAPTER ONE INTRODUCTION .....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 Research Background .....	1
1.3 Problem Statement.....	5
1.4 Objective Of The Study .....	6
1.5 Research Questions.....	7
1.6 Contribution Of The Study .....	7
<b>CHAPTER TWO LITERATURE REVIEW .....</b>	<b>9</b>
2.1 Introduction.....	9
2.2 Theoretical Framework On Bank's Profitability .....	9
2.2.1 Signaling Theory .....	10
2.2.2 Relative Efficiency Hypothesis.....	11
2.2.3 The Structure-Conduct-Performance Theory.....	11
2.2.4 Efficiency Structure Theory .....	12
2.2.5 Expense-Preference Theory .....	14
2.3 Review Of Literature On The Determinants Of Islamic Banking Profitability .....	15
2.3.1 Return On Asset (Roa) .....	15
2.3.2 Return On Equity (Roe) .....	17
2.3.3 Capital Ratio .....	19
2.3.4 Liquidity .....	20
2.3.5 Bank Size .....	22
2.3.6 Asset Quality .....	22
2.3.7 Cost To Income Ratio .....	24
2.3.9 Inflation .....	26
2.3.10 Concentration .....	27
2.5 Conceptual Framework.....	28
2.6 The Gap In The Literature Review .....	29
2.7 Chapter Summary .....	30

<b>CHAPTER THREE HYPOTHESES DEVELOPMENT RESEARCH</b>	
<b>METHODOLOGY</b> .....	31
3.1 Introduction.....	31
3.2 Hypothesis Development.....	31
3.2.1 Capital Ratio .....	31
3.2.2 Bank Size .....	32
3.2.3 Liquidity.....	33
3.2.4 Asset Quality.....	33
3.2.5 Cost-To- Income Ratio.....	34
3.2.6 Gross Domestic Product (Gdp).....	35
3.2.7 Inflation.....	35
3.2.8 Concentration .....	36
3.3 Research Design .....	36
3.4 Target Study Population .....	37
3.4.1 Sampling Frame .....	37
3.5 Data Collection Methods .....	38
3.6 Data Analysis.....	39
3.7 Definition Of The Key Concepts And Variable Measurements .....	42
3.7.1 Return On Asset (Roa).....	42
3.7.2 Return On Equity (Roe).....	45
3.7.3 Capital Ratio .....	46
3.7.4 Liquidity.....	48
3.7.5 Bank Size .....	49
3.7.6 Asset Quality.....	50
3.7.7 Cost To Income Ratio .....	51
3.7.9 Inflation.....	53
3.7.10 Concentration .....	54
3.8 Methodology.....	56
3.8.1 The Statistical Model .....	56
3.9 Model Specification.....	57
3.10 Estimation Method.....	57
3.11 Conclusion .....	58
<b>CHAPTER FOUR FINDINGS AND DISCUSSIONS</b> .....	59
4.1 Introduction.....	59
4.2 Descriptive Statistics .....	59
4.2.1 Islamic Banking Profitability Variables.....	60
4.3 Correlation Matrix Analysis .....	63
4.4. Variance Inflation Factor .....	66
4.5 Findings And Analysis Of Malaysian Wholesome Islamic Banking .....	71
4.4 Findings And Analysis Of Malaysian Islamic Banking Subsidiaries.....	78
4.6 Comparison Results Of Determinants Malaysian Islamic Banking Window And Malaysian Full-Fledged Islamic Banking.....	81
4.7 Chapter Summary .....	87
<b>CHAPTER FIVE CONCLUSIONS</b> .....	89
5.1 Introduction.....	89
5.2 Summary Of The Study .....	89
5.2.1 Summary Of The Findings.....	90

5.3 Contribution Of The Study .....	93
5.4 Policy Implications .....	94
5.5 Limitations Of The Study And Further Research.....	96
<b>REFERENCES.....</b>	<b>98</b>

## LIST OF TABLES

Table 3.1 List of Islamic Banks in Malaysia	38
Table 3.2 Measurement Variable	55
Table 4.1 Descriptive Statistics of Malaysian Islamic Banking subsidiaries	60
Table 4.2 Descriptive Statistics of Malaysian wholesome Islamic Banking	60
Table 4.3 Correlation matrix analysis	65
Table 4.8 The Determinant of Malaysian wholesome Islamic Banking Results of the Static Model	68
Table 4.9 The Determinants of Malaysian wholesome Islamic banking GLS model	69
Table 4.10 The Determinant of Malaysian wholesome Islamic Banking Results of the Static Model	70
Table 4.11 The Determinants of Malaysian wholesome Islamic banking GLS Model	71
Table 4.4 The Determinants of the Profitability of Islamic Banking subsidiaries Results of the Static Model	75
Table 4.5 The Determinants of the Profitability of Islamic Banking subsidiaries Result of GLS Model	76
Table 4.6 The Determinants of the Profitability of Islamic Banking subsidiaries Result of the Static Model	76
Table 4.12 The Determinants of Malaysian Islamic Banking Profitability: Islamic Banking subsidiaries versus wholesome Islamic Banking	78

## **LIST OF FIGURES**

Figure 2.1	Determinants of Islamic Banking Profitability	29
------------	---	----

## LIST OF ABBREVIATIONS

BIMB	Bank Islam Malaysia Berhad
BNM	Bank Negara Malaysia
SCP	Structure Conduct Performance Theory
ROA	Return on Asset
ROE	Return on Equity
NIM	Net Interest Margin
CAR	Capital Ratio
BSIZA	Bank Size
CIC	Cost to Income Ratios
AQ	Asset Quality
GDP	Gross Domestic Product
INF	Inflation
CONC	Concentration
GLS	Generalized Least Square
GMM	Generalized Method of Moments

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 INTRODUCTION**

This chapter explains the introduction of the determinants of Malaysian Islamic banking's profitability. More specifically, it presents an overview of the background of the study followed by an explanation of the problem statement. It also contains objectives of the study, research questions, hypothesis, and significance of the study.

### **1.2 RESEARCH BACKGROUND**

Islamic banking is a banking system that fulfils Islamic law as well as recognized as Shariah law. The fundamental principles that run the system of Islamic banking are profit and loss sharing, and asset-backed transaction. Accordingly, Islamic banking's core values encouraged by these principals while activities that trade and commerce, cultivate entrepreneurship and get societal development or advantages is supported. In the context of Islamic banking, undertaking Interest rate (*riba*), speculative trading and gambling (*maysir*) are strictly forbidden (Chua, 2013). The Islamic banking system is not only accepted by Muslims but similarly has attracted non-Muslims (Lo & Leow, 2014).

Moreover, Islamic banking and finance has made fabulous progress since was introduced in the 1970s and gained the attention of the investor and researchers. It was defined finance that governed by the values and the principle of Islamic law (Al-sartawi and Reyad, 2019). Additionally, the assets of Islamic finance have grown substantially from \$150billion in the mid-1990's to \$700billion in 2007. Currently, Islamic banks are operating around the globe with an asset of more than \$160 billion and it has recorded

a growth rate between 10% and 15%. In addition to that, the Islamic financial institutions' market share rose from 2% in the 1970s to 15% in 2018 (Khasharmeh, 2018). According to Dubai Islamic Bank (2017), the size of Islamic finance industry was US\$2,293billion in 2016, and this was a massive increase of US\$150billion over 2015, and there are two estimates for the Islamic finance size projected in 2020 which are US\$3,006billion or US\$4,362billion. The former one is based on the estimate that the industry will grow at a current rate of 7% in the next four years while the latter one based on that the industry will grow compound annual growth of 15.27%. Currently, over four hundred seventy-five Islamic financial institutions and also more than two hundred fifty mutual funds Shariah-compliant are working globally across seventy-five countries with the most significant centre in the Middle East and southeast (Ullah and Khanam, 2016). The asset under management of full-fledged Islamic and conventional banks windows are 75% of total assets in Islamic finance in the world, and almost 60% of these assets are held by full-fledged Islamic banks (Dubai Islamic Bank, 2017).

In the context of Malaysia, Islamic banking idea was initiated in the 1980s for allowing Muslims to get a sound banking system. Therefore, the first Islamic banking in Malaysia was established in 1983 which was Bank Islam Malaysia Berhad (BIMB). The BIMB worked merely Islamic banking intended a decade before the government permitted on conventional banking to deliver the products and services of Islamic banking adopting for July 1983 later on by standing structure and divisions in 1993 (Mohammed et al., 2015). Moreover, in 1993, the Malaysian government deregulated the banking industry heavily to agree on conventional banking to contribute the product of Islamic banking through Islamic window. Enhancing the system of dual banking can be reliable for encouraging in Islamic banks as entire 1993 (Mohammad et al., 2015).



Besides, the establishment of the Islamic Banking act in 1983 gives the power Bank Negara Malaysia (BNM) to monitor and supervise the Islamic banks in the country. Although Malaysian parliament had passed different laws about Islamic finance including Central Bank of Malaysia Act 2009, but the latest development in Islamic finance legislation in Malaysia is statute of new act which is called Islamic financial services act (IFSA) of 2013, which was restored and repealed previous acts (Dubai Islamic Bank, 2017). In terms of Shariah government framework, the last one was declared 20 September 2019, which will come into effect on 1<sup>st</sup> April 2020 and this Shariah governance was planned to help the previous Shariah governance framework introduced in 2011 (BNM, 2019). In the context of the Malaysian banking system, it can be obtained by two different types of the banking system, which are the Islamic banking system and conventional banking system. Bank Negara Malaysia (BNM) governs both of them, the Islamic banking of Malaysia is growing vastly, and that is bushing by the creating of conventional banking Islamic windows which are a separate subsidiary from the conventional banks to contribute the development of Islamic banking sector in the country (Wasiuzzaman & Gunasegavan, 2013).

Malaysia was set to become the hub of Islamic finance in the world in terms of leadership, institutional establishments and the product development, the regulations change participated the Islamic banking industry development working with side by side conventional banking system (Muhammad et al., 2015). The reasons behind the fast development of Islamic banking in Malaysia is the government backing, Malaysia became of the most developed nation in Islamic finance in the globe, and the implementation of four strategic plan was helped Malaysia to be forefront in Islamic finance which are regulatory framework enhancement, Shariah regulatory framework, products and services improvements markets, and enhancement of knowledge and

expertise (Dubai Islamic Bank, 2017). The Islamic banking industry development in the country, Malaysia is divided into three different phases (Muhammad et al., 2015). The first stage is called familiarization phase, which was the establishment of BIMB in 1983 and awarded BIMB to have a monopoly in Islamic banking market for ten years in order to protect this new system from the powerful conventional banks.

The second phase was known as the development phase in between 1993 and 2003. This period was created a competitive environment among the Islamic banks and increased the awareness of the Muslim society participating the benefits of Islamic banks development to increase the number of Islamic financial institutions that are in the markets. BNM had also issued a new scheme called no interest in the banks or Skim Perbankan Tanpa Faedah (SPTF) in March 1993. in this period the second Islamic Full-fledged Bank Muammalat Malaysia Berhad which was opened in 1999, this period also increased Islamic financial institutions and the Islamic banking products were offered. The third stage was concerned about the developments of the institutions, particularly banking divisions and this phase was a liberalization phase. This period was given new licenses to domestic Islamic financial institutions to be full-fledged Islamic banks, and the liberalization contributes the appearance of new Islamic foreign full-fledged banks including the following once which are Asian Finance Bank Berhad, Kuwait Finance House Berhad and Al Rajhi Banking & Investment Corporation Berhad (Muhammad et al., 2015). So, the development of Islamic banks in Malaysia was moved through different levels.

The objectives of Islamic banks are not only to attain a more significant profit by increasing the shareholder's wealth by attaining of higher profit on their investment, but also to contribute the economic and social development of the people. (Masood & Ashraf, 2015; Mohammed and Muhammed, 2017).

### **1.3 PROBLEM STATEMENT**

Banking Industry is one of the most important industries that supports the development of a country. Like some other financial institution and capital market, Islamic banks are the institutions which are significantly needed by the real sectors in doing their business. Additionally, in a well-functioning economy, the banking sector plays a crucial role in providing financial intermediation as well as transferring deposits into productive investment. Further, banks are the suppliers of funds desired for investment. Accordingly, the stability of banking is crucial for the financial system. Thus, the profitability of the banking area becomes significant to the economy of the nation since higher profits in the banking sector always may lead to financial stability (Hirindukawshala, 2017).

As the consequence, many parties have the interests to require their banking industry running well. For the government, well organized banking industry would be favourable since it could show that monetary system, banking and payment system in that country are well run. For the business parties, the well-run banking industry will ease the transactions they make with their counterparties including financial scheme when required. As for depositors' profitable Islamic banks can give confidence to depositors that their deposits are safe. For the management of banks themselves, the sound bank management for each bank would become positive points to fulfil the responsibilities to the stockholders.

Moreover, banking performance helps as a sign to the customers whether they should be investing or withdrawing their funds from the bank. Also, it provides bank managers a signal whether they require to progress the bank's services in order to improve its finance (Samad & Hassan, 1999). In Islamic banking, understanding the profitability of is an essential instrument by developing performance, assessing banking

activities and to determine management plan by benefiting and improving the opportunity of banking to continue in the competition markets. (Rahman et al., 2015). A review of previous studies on bank profitability provides a reflection on this study to be conducted. Besides, there is a need to determine whether there is a gap between previous studies. First, previous studies have focused so far on Islamic and conventional banking profitability in Malaysia, so, as far as I know, this study seeks to provide new support after the global financial crises in 2008 about the profitability of Islamic banks in Malaysia. Secondly, this first study attempts to identify the differences in the determinants of profitability between Islamic Banking window and full-fledged Islamic Banking in Malaysia.

Many authors have studied the profitability of Islamic banks in Malaysia but have emphasized various conclusions. (Idris et al., 2011), (Tan, 2012) and (Wasiuman, 2010). So far, few efforts have been made to consider the effects of Islamic bank particularly on profitability concerns. Thus, this study is followed the route to fill this gap. It enhances literature in the respect by looking at the features of Islamic banking to determine the determinants of profitability. Therefore, the aim of the study is discovering factors that influence the Malaysian Islamic banking profitability by comparing wholesome Islamic banking with Islamic banking subsidiaries between the year 2009 and 2017. The critical importance of this study is building a widespread model which takes part in the macroeconomic and bank-specific determinant.

#### **1.4 OBJECTIVE OF THE STUDY**

For the purpose, this research is investigating determinants of Islamic banks' profitability in Malaysia by comparing wholesome of Islamic banking and Islamic banks subsidiaries.

- 1) To investigate the factors that affect the profitability of wholesome Islamic banks in Malaysia.
- 2) To investigate the factors that affect the profitability of Islamic banking subsidiaries in Malaysia.
- 3) To compare the factors affecting the profitability of wholesome Islamic banking and Islamic banks subsidiaries in Malaysia.

### **1.5 RESEARCH QUESTIONS**

- 1) What are the factors that are affecting wholesome Islamic banking profitability in Malaysia?
- 2) What are the factors that are affecting Islamic banking subsidiaries profitability in Malaysia?
- 3) What are the causes that are affecting the profitability of wholesome Islamic banks and Islamic banking subsidiaries?

### **1.6 CONTRIBUTION OF THE STUDY**

The study examines crucial factors including bank-specific, industry and macro factors that may significantly impact the Islamic banking profitability. The significance of this study can be considered as a reference by Islamic banks to control the variables that could harm their performance and the other support to encourage the variables that have a positive impact on their profitability. The finding of this study offers stakeholders inside of the Islamic banking sector with information and understanding of how determinants of profitability influences Islamic banking. The Islamic banks will also use the information from this study in making informed decisions necessary to enhance their various products. Furthermore, this study will help the policymakers in their

energy to advance the profitability and efficiency of the Islamic banking sector and identify the need for future reforms in the Islamic banks. Finally, this research will help academicians gain knowledge generated profitability of Islamic banking because there is little research done about Islamic profitability. Therefore, this research provides a basis in which future scholars can expound and base their research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter offers the overview of the prior works of literature and different theories concerning bank profitability, as well as determinants of bank profitability. It begins with a theoretical framework of banking profitability. The chapter proceeds to the determinants of Islamic banking profitability. Next, it focused on the empirical findings of the banking profitability. Moreover, the conceptual framework, which indicates how the profitability and its determinants influence banks is presented. Lastly, the literature gap and chapter summary are then discussed.

#### **2.2 THEORETICAL FRAMEWORK ON BANK'S PROFITABILITY**

In general, banks seek to maximize profits by employing resources and controlling internal determinants. Similarly, financial institutions are also seeking to benefit from external factors outside their control. Decades ago, numerous theories were developed to explain the relationships and financial performance of companies and banks, but in this study, it relates to the performance of banks.

When discussing banking profitability trends, it is proper to recall specifically why banks are gaining profits. The shareholders of the bank are naturally demanding their profits, and therefore it is in their interest to maximize these profits. It maximizes your return on investment by increasing revenue and reducing costs. The management of bank can choose a set of inputs as well as outputs, through which profits are increased, where they have different preferences, giving up high-risk opportunities, high returns, and increasing profits (Jacob and Jaap, 2008).

This part argues economic theories related to the profitability of the bank. The determinants of bank profitability have been investigated in several theories. According to Haron (1997) and Haron & Azmi (2004), most studies of bank profitability determinants concentrated on the following theories.

### **2.2.1 Signaling Theory**

Signaling theory indicates that bank management guides difference signals that the future prospect is promising by increasing capital (Berger, 1995; and Trujillo-Ponce, 2012). So that Ommeren (2011) states that a lower in leverage ratio means that the banks' performance is better than their competitors who cannot improve their equity without more loss in their profits. The signaling theory explains the relationship among capital and profitability. Berger, 1995; Trujillo Ponce, 2012), the expected bankruptcy cost hypothesis as well the risk return hypothesis (Olweny and Shiphoh, 2011; Brissimis and Delis, 2005).

The signal theory suggested that the capital increase is a positive sign to the market at the bank's worth (Ommeren, 2011). Berger also envisioned that, under signal theory, bank management indicated special information that predictions were worth the capital increase. Thus, lesser leverage shows that banks are achieving better than their competitors who cannot increase their rights without extra failure in profitability (Ommeren, 2011). According to the signal theory, the bank's management makes reasonable future expectations through capital growth. The lower debt ratio basically means that these banks can achieve better results than their counterparts (Khazaleh and Misfer, 2014).