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**COMPARATIVE ANALYSIS ON THE PROFITABILITY
DETERMINANTS OF MALAYSIAN ISLAMIC AND
CONVENTIONAL BANKS**



**MASTER IN ISLAMIC FINANCE AND BANKING
UNIVERSITY UTARA MALAYSIA
JUNE 2018**

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OF MALAYSIAN ISLAMIC AND CONVENTIONAL BANKS**



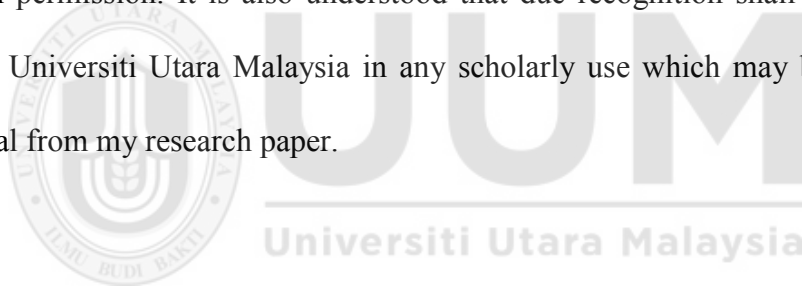
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**Research Paper Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Partial Fulfillment of Requirement for the Master in Islamic Finance and
Banking**

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ABSTRACT

Islamic Banking has become competitive against conventional banking since it is one of the fastest growing institutions nowadays. Therefore, it is reasonable to expect that the performance of both Islamic and conventional banks has become the center of attention particularly in term of their profitability. The main objective of this study is to compare the bank-specific factor that mainly impacts on the profitability of Islamic and Conventional banks. The dependent variable for this study is Return on Asset (ROA) while the independent variables are Capital Ratio (ETA), Bank Size (SIZE), Liquidity Ratio (LIQR) and Deposit Ratio (DTA). Secondary data was used from 16 Islamic banks (144 observations) and 22 Conventional banks in Malaysia (183 observations), over the 2008 - 2016 period. The study found that the bank-specific factors, namely ETA and DTA have a significant impact on the profitability of Islamic banks in Malaysia. Meanwhile, for the Conventional banks in Malaysia, SIZE, LIQR, and DTA are found to be significant to their profitability.

Keywords: profitability, Islamic banks, Conventional banks, bank-specific factors



ABSTRAK

Perbankan Islam telah menjadi persaingan terhadap perbankan konvensional kerana ia merupakan salah satu institusi yang paling cepat berkembang pada masa kini. Oleh itu, adalah munasabah untuk menjangkakan prestasi kedua-dua jenis bank ini menjadi perhatian terutamanya dari aspek keuntungan mereka. Objektif utama kajian ini adalah untuk membandingkan faktor dalaman bank yang memberi kesan terutamanya kepada keuntungan bank Islam dan bank Konvensional. Pemboleh ubah bersandar untuk kajian ini adalah Pulangan Atas Aset (ROA) manakala pembolehubah tidak bersandar adalah Nisbah Modal (ETA), saiz bank (SIZE), Nisbah Kecairan (LIQR) dan Nisbah Deposit (DTA). Data sekunder digunakan dari 16 bank Islam (144 pemerhatian) dan 22 bank konvensional di Malaysia (183 pemerhatian), sepanjang tempoh 2008 - 2016. Kajian mendapati faktor-faktor khusus bank, iaitu ETA dan DTA mempunyai kesan yang signifikan ke atas keuntungan bank Islam di Malaysia. Sementara itu, bagi bank Konvensional di Malaysia, SIZE, LIQR dan DTA adalah penyumbang signifikan kepada keuntungan mereka.

Kata kunci: keuntungan, bank Islam, bank Konvensional, faktor dalaman bank



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LIST OF ABBREVIATIONS

BIMB	Bank Islam Malaysia Berhad
BNM	Bank Negara Malaysia
ETA	Capital Ratio
DTA	Deposit Ratio
FEM	Fixed Effects Model
IBS	Islamic Banking Scheme
LIQR	Liquidity Ratio
PWSBH	Perbadanan Wang Simpanan Bakal-Bakal Haji
ROA	Return on Asset
ROAA	Return on Average Asset
ROE	Return on Equity
SCP	Structure Conduct Performance
SIZE	Bank Size

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This research aimed to study the impact of bank-specific factors upon the profitability of Islamic and Conventional banks in Malaysia. This chapter mainly discusses the outline and overall context of the study. In particular, it consists of a background of the study as a general discussion of the topic, research problem as a discussion on the arising issue, research questions and research objectives as a guideline to this topic. On the other hand, there is the significance of the study, scope and limitation of study and organization of study were included in this chapter.

1.1 Background of the study

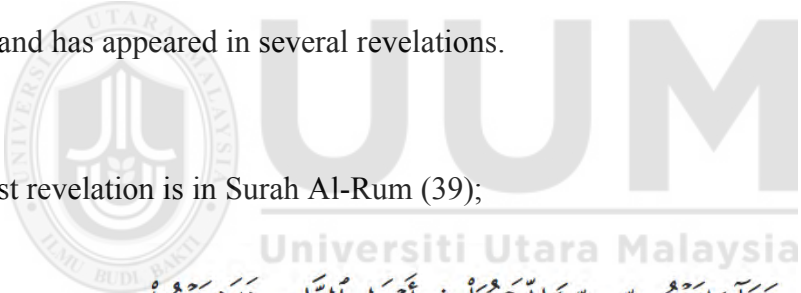
Banking industry plays an undisputed role in the development of the economic growth (Chapra, 2008) as it ensures the financial resources flows efficiently from the depositors to the borrowers. At the present time, the banking system in Malaysia consists of investment banks, commercial banks, international Islamic banks and Islamic banks which are the main money resources as well as the key supply of financing in order to strengthen the Malaysian economic activities (Omar et al. (2017).

Malaysia has a unique banking system where Islamic and Conventional banks operate side by side and it has appeared as the first country to implement a dual banking system. Islamic banking system was introduced in Malaysia in 1963 with the establishment of Perbadanan Wang Simpanan Bakal-Bakal Haji (PWSBH). PWSBH

was introduced in order to give the option for Muslim to save their money to perform *Hajj*. Later, in 1969, PWSBH merged with Pejabat Urusan Haji and form Lembaga Tabung Haji. The enactment of the Islamic Banking Act 1983 enabled the establishment of the first Malaysian Islamic Bank in 1983 namely Bank Islam Malaysia Berhad (BIMB). Subsequently, the Conventional banks were also allowed to offer the Islamic banking products and services under Islamic Banking Scheme (IBS) but they must separate their Islamic banking funds and activities from the Conventional banking activities to ensure there is no mingling of funds.

Conventional banking is based on interest which is against with the Shariah law. Dealing with interest (*riba*) is strictly prohibited as Allah SWT has mentioned in Quran and has appeared in several revelations.

The first revelation is in Surah Al-Rum (39);



وَمَا آتَيْتُم مِّن رَّبٍّ لَّيْرَبُوا فِي أَمْوَالِ النَّاسِ فَلَا يَرْبُوا
عِنْدَ اللَّهِ وَمَا آتَيْتُم مِّن زَكَاةٍ تُرِيدُونَ وَجْهَ اللَّهِ
فَأُولَٰئِكَ هُمُ الْمُضْعِفُونَ ﴿٣٩﴾

“That which you give in usury in order that it may increase on (other) people’s property hath no increase with Allah, but that which you give in charity, seeking Allah’s Countenance, hath increase manifold”.

The second revelation is in Surah An-Nisaa (161);

وَأَخْذِهِمُ الرِّبَا وَقَدْ نُهُوا عَنْهُ وَأَكْلِهِمْ أَمْوَالِ النَّاسِ بِالْبَاطِلِ
وَأَعْتَدْنَا لِلْكَافِرِينَ مِنْهُمْ عَذَابًا أَلِيمًا ﴿١٦١﴾

“And of their taking usury when they were forbidden it, and of their devouring people’s wealth by false pretences, We have prepared for those of them who disbelieve a painful doom”.

The third revelation is in Surah Al-Imran (130);

يَا أَيُّهَا الَّذِينَ ءَامَنُوا لَا تَأْكُلُوا الرِّبَا أَضْعَافًا
مُضَاعَفَةً ۖ وَاتَّقُوا اللَّهَ لَعَلَّكُمْ تُفْلِحُونَ ﴿١٣٠﴾

“O you who believe! Devour not usury, doubling and quadrupling (the sum lent). Observe your duty to Allah, that you may be successful”.

The fourth revelation is in Surah Al-Baqarah (275);

الَّذِينَ يَأْكُلُونَ الرِّبَا لَا يَقُومُونَ إِلَّا كَمَا يَقُومُ
الَّذِي يَتَخَبَّطُهُ الشَّيْطَانُ مِنَ الْمَسِّ ۚ ذَٰلِكَ بِأَنَّهُمْ قَالُوا
إِنَّمَا الْبَيْعُ مِثْلُ الرِّبَا ۚ وَأَحَلَّ اللَّهُ الْبَيْعَ وَحَرَّمَ الرِّبَا ۚ
فَمَنْ جَاءَهُ مَوْعِظَةٌ مِنْ رَبِّهِ فَانْتَهَىٰ فَلَهُ مَا سَلَفَ وَأَمْرُهُ
إِلَى اللَّهِ وَمَنْ عَادَ فَأُولَٰئِكَ أَصْحَابُ النَّارِ ۖ هُمْ فِيهَا
خَالِدُونَ ﴿٢٧٥﴾

“Those who swallow usury cannot rise up save as he arises whom the devil hath prostrated by (his) touch). That is because they say: trade is just like usury, whereas Allah permits trading and forbids usury. He unto whom an admonition from his Lord cometh, and (he) refrained (in obedience thereto), he shall keep (the profits of) that which is past, and his affair (henceforth) is with Allah. As for him who returned (to usury)- Such are rightful owners of the Fire. They will abide therein”.

The verses above clearly stated that Islamic banks are prohibited from taking *riba* (interest). The crux of Islamic banking is that any profit gained by the banks must be interest-free based.

Generally, Islamic bank act as an intermediary and trustee of the deposit placed by the customers similar to the Conventional. However, the differences between the Islamic and Conventional banks lies on how the profit and loss are shared among the depositors in Islamic banks (Dar & Presley, 2000). The differences between Islamic and Conventional banking is summarized in Table 1.1.

Table 1.1

Differences between Islamic and Conventional banks.

Islamic Banks	Conventional Banks
Operating modes and function are based on the Islamic law.	Operating modes and function are based on manmade principles.
Subject to Shariah restriction in making a profit.	No restriction in making a profit.
Promotes the concept of risk sharing between the capital provider (investor) and the user of funds (entrepreneur).	It is assured to the investor a predetermined interest rate.
Deals with <i>Zakat</i> .	Does not deals with <i>Zakat</i> .
Utilized real asset as a product not money as a medium of exchange.	Money is considered as a product besides medium of exchange and store of value.

Source: Zaharuddin (2007)

Ernst and Young (2016) reported in their World Islamic Banking Competitiveness Report that the asset growth for Islamic banks is higher which is about 4% compared to Conventional which is 1% only in 2014. Besides, Islamic banking market in Malaysia also is still growing and expected to surpass the Conventional banking loan

growth in near future (The Star Online, 2017). This shows that Islamic Banking has become competitive against Conventional banking since it is one of the fastest growing institutions. Therefore, it is reasonable to expect that the performance of both Islamic and Conventional banks has become the center of attention particularly in term of their profitability.

1.2 Problem Statement

The world was jolted by the global financial crisis on 2008 and many financial institutions was suffered during that time (Pramuka, 2011). According to Khoon and Mah-Hui (2010), the global financial crisis affected financial and economic environment in the second half of 2008. Chapra (2008) asserts that during the financial crisis, Islamic banks are slightly affected compared to Conventional banks. Similarly, Amba and Almukharreq (2013) and Mohamed and Kassim (2012) from their study found that that Islamic Bank was performed slightly better than Conventional bank during the financial turmoil of 2008. Figure 1.1 denotes that profitability of the Conventional banks increased by 1.13% which is higher than Islamic banks that only increased by 0.77% from 2008 to 2009. However, from 2009 to 2010, Islamic banks profitability increased by 0.43% and the profitability of conventional banks decreased by 1.51%. The trends show inconsistency in the profitability of Islamic and Conventional banks. Therefore, it has attracted the researcher to further investigate the profitability of the Islamic and Conventional banks after the financial crisis period.

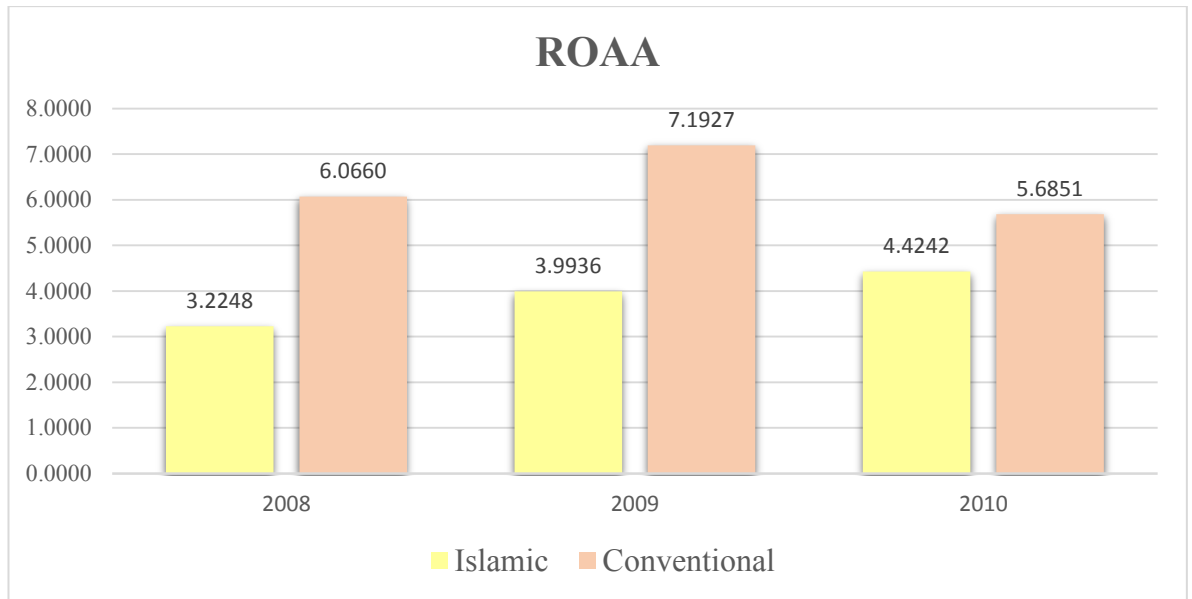


Figure 1.1

Profitability (ROAA) for Islamic and Conventional banks in Malaysia

Sources: Fitch Connect Database

Substantial studies on the profitability of the banks in Malaysia have been done such as Aziz (2017); Abduh and Idrees (2013); Haron (1997); Wasiuzzaman and Hanimas (2010); Baharuddin and Azmi (2015); Tafri et al. (2009) and San and Heng (2013). These studies focus only on factors that influence either profitability of Islamic, commercial or Conventional banks. These factors include capital adequacy, asset quality, bank age, deposits, operational efficiency, board size, bank size, liquidity, impaired financing, and loan loss provision.

However, there have been limited studies on the comparative analysis of the profitability between Islamic and Conventional banks particularly in Malaysia, namely Al-Mamun (2014); Kamaruddin and Mohd (2013); Hassene and Kais (2016); Ramlan and Adnan (2016); Fah and Hassani (2014); Rozzani and Rahman (2013); Hazzi and Al-Kilani (2013); Abduh et al., (2013); Wasiuzzaman and Gunasegavan (2013) and Hamid and Azmi (2011).

Besides, most of the researchers mentioned do not emphasize the factor that contributes to the profitability of both Islamic and Conventional. Hence, this study attempts to fulfill the gap by examining the factors that impact the profitability of Islamic and Conventional banks in Malaysia, specifically on the bank-specific factor. According to Mahmud et al. (2016), bank-specific factors are crucial in determining the profitability of the bank. Besides, Abduh and Idrees (2013) emphasized that bank-specific factors have more ability to influence the bank's profitability. Lukorito et al. (2014) stated that in order for a bank to survive and remain competitive, they need to understand the internal factors which they can manipulate to their advantage to maximize the profit.

Apart from that, the previous studies only cover the study period from 2000 to 2015. For instance, Al-Mamun (2014) covers the period from 2003 to 2010; Kamaruddin and Mohd (2013) from 2007 to 2011; Hassene and Kais (2016) study from 2000 to 2015; Ramlan and Adnan (2016) from 2006 to 2011; Fah and Hassani (2014) covers from 2006 to 2011; Rozzani and Rahman (2013) from 2008 to 2011; Hazzi and Al-Kilani (2013) study from 2007 to 2011; Abduh et al., (2013) from 2005 to 2009; Wasiuzzaman and Gunasegavan (2013) covers from 2005 to 2009 and Hamid and Azmi (2011) from 2000 to 2009. Therefore, the researcher intends to investigate the profitability of Islamic and Conventional banks which covers the latest year from 2008 to 2016.

1.3 Research Question

The research question for this study is based on the problem that researcher stated above.

1. How bank-specific factor affect the profitability of Islamic banks?
2. How bank-specific factor affect the profitability of Conventional banks?
3. Which determinants are mainly contributed to the profitability of Islamic and Conventional banks?

1.4 Research Objective

The research objectives are based on the research question above.

1. To examines the impact of a bank-specific factor on the profitability of Islamic banks.
2. To examines the impact of a bank-specific factor on the profitability of Conventional banks.
3. To compare the bank-specific factor that mainly impacts on the profitability of Islamic and Conventional banks.

1.5 Significance of the Study

The findings of this study could provide a comprehensive analysis of profitability determinants of Islamic banks and Conventional banks in Malaysia. Unlike most existing study that focuses only on either Islamic or Conventional banks, this study emphasizes both aspects. Therefore, this study will contribute to the literature on profitability determinants as well as the performance of Islamic and Conventional banks. The result from this study is expected to be useful to the bank management in order to improvise their performance to maximize their profit.

Aside from providing general knowledge regards to the banking sector, this study also provides a clearer picture of the difference between Islamic and Conventional banks to the academicians and student. They are able to discover factors that would influence the performance of the banks and the impact of those factors have on the Islamic and Conventional banks in Malaysia. Other than that, they are also will able to make a comparison between the factors that affect Islamic banks profitability and factors that affect Conventional banks profitability.

Besides that, this study is also will be beneficial to the investors. Investors could make their investment decision wisely by knowing the factors that could influence the performance of banks and able to identify which banks either Conventional or Islamic bank, should they invest in.

1.6 Scope and Limitations of the Study

This study focuses on the impact of bank-specific factors on the profitability of Islamic and Conventional banks. The scope of the study period is between 2008 until 2016. This study limited to secondary data derived from annual reports of the selected banks obtained from Fitch Connect database. The study does not cover all Conventional banks in Malaysia due to the availability of the data. Thus, this study covers 22 Conventional banks and total of 16 Islamic bank in Malaysia.

1.7 Organization of the thesis

This paper is divided into five (5) chapters. Chapter One provides the background of the study, problem statement, research question, research objectives, research scope and the research paper outline. As for the Chapter Two, it contains the reviews of

literature from previous literature and the theory that are related to this study. The methodology of study will be explained in Chapter Three. Chapter Four presents the result and discussion of these study findings based on the research questions and objectives. Last but not least, the researcher will come out with conclusions and recommendations in the Chapter Five.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter explains the dependent variables and the relationship between independent and dependent variable. Section 2.1 reviews a literature on the concept of profitability, section 2.2 provides a critical evaluation of the bank-specific factors influencing the profitability respectively. Section 2.3 ends the chapter with the related theories.

2.1 Concept of Profitability

Profitability can be defined as the ability of institutions, firm, company or organization to make a profit from their business activities. Profitability is defined by Wiyono and Sari Rahmayuni (2012) as the major source of capital income that measures the corporate performance to express the competitive position of banks in the banking market and quality management. According to Aziz (2017), one of the vital indicators of performance is profitability.

Based on the previous study, profitability can be measured by different variable namely Return on Equity (ROE) and Return on Asset (ROA) since these two are the most often used profitability ratios. As stated by Singh (2010), ROA and ROE are closely related to net profit. Many of the previous studies have addressed the factors of bank profitability using ROA and ROE, for examples, Haule (2017); Abdulazeez et al. (2017); Anupam and Ganga (2017) and Ramlan and Adnan (2016).

Return on Asset (ROA) refers to the profitability of the firm's asset after deducting all the taxes and expenses (Van Horne and Wachowicz, 2005). Generally, it measures the operating efficiency based on the generated profits of the firms from its total assets (Kabajeh et al., 2012). According to Hagel et al., (2013), ROA is the most effective financial measures to evaluate the performance of the firm as it shows the company performance comprehensively by looking at both income statement performance and the asset required by the firm to run their business. This study uses ROA as the dependent variable. According to Flamini et al (2009), it is better to use ROA as a key proxy than ROE because an analysis on ROE does not include financial leverage.

2.2 Bank-specific factors

The Bank Specific factors or internal factors are individual bank characteristics which affect the bank's profitability (Mbella and Magloire, 2017). The internal factors identified and analyzed in this study are as stipulated below.

2.2.1 Capital

Capital ratio refers to the ratio of total equity to total assets which help to determine the number of assets that shareholders have a residual claim (Abduh and Alias, 2014). This is the most standard ratio used to determine the overall financial stability of the banks. It measures the level of leverage used by a bank. High ratios demonstrate that the banks' managerial performance well. The previous study has shown that there is a significant relationship between bank capital and profitability.

Supported by Waisuzzaman and Hanimas (2010), who analyzed the effect of bank-specific factors on the profitability of Islamic banks in Malaysia for the period of

2005 to 2008 revealed that capital is negatively and significantly related to the profitability of Islamic bank in Malaysia. This suggests that Malaysian Islamic banks should not focus on improving the equity performance in order to increase their profitability. In contrast, Anupam and Ganga (2017) analyze the relationship between of bank-specific factor towards the profitability in UAE found that profitability was positively related to the capital. This result consistent with studies done by Saira et al. (2011) and Hajer et al. (2016) which also found that there is a positive and significant relationship between capital and profitability. These results assert that by maintaining a high capital ratio, the Islamic banks can increase their profitability.

Based on previous study regards to the profitability of commercial bank, San and Heng (2013) who examined the effect of bank-specific factors on the profitability indicates that capital has a positive impact on the profitability of the commercial banks in Malaysia. In line with the study by Delis and Staikouras (2006) which also found that capital is positively related to banks' profitability. The results indicate that through stronger capitalization, the banks can reduce the expected financial distress costs.

Meanwhile, Hassene and Kais (2016) analysed the performance of Islamic and Conventional banks in Malaysia, they employed Fixed Effect model of 17 Islamic banks and 17 Conventional banks for the period from 2000 to 2015 found that the relationship between capital and profitability is positive and significant for Islamic bank but negative and significant for the Conventional bank. Based on the results, it indicates that an increase in the capital will contribute to a higher profitability of

Islamic banks. Kamaruddin and Mohd (2013) study on the performance of the Islamic and Conventional bank in Malaysia found that both Islamic and Conventional bank have a positively significant relationship between capital and profitability.

Based on the previous studies, there is a significant relationship between capital and profitability but with a different impact. Thus, capital is included in this research conceptual framework and to be tested on the profitability of Islamic and Conventional banks in Malaysia.

2.2.2 Bank Size

Bank size is measured as the logarithm of the total asset of the bank. According to Idris et al. (2011), stated that bank size is a robust factor that gives a positively impact on the level of profitability. Consistent with a study from Ali et al. (2017) who examined the Islamic bank's profitability in Yemen, indicates that bank size has a positive impact on the profitability. In contrast, Aziz (2017) examined the impact of internal factors on the profitability of Islamic banks for the period 2009 to 2015. From the study, bank size was found to have a negative significant relationship with the profitability. This shows that as the bank size increases, it does not necessarily lead to higher profits. Although larger banks have the advantages of more access to additional financing sources, they actually have to face higher risk in dealing with liquidity problems and diversifying products.

Meanwhile, San and Heng (2013) study on the profitability of Conventional bank in Malaysia found that bank size is positively significant to the profitability. Goddard et

al. (2004) examined growth and profit equations for 583 European banks indicates that bank size has a positively related to profitability.

Besides that, a comparative study to identify the profitability determinants of 18 Islamic and 18 Conventional banks in GCC for the period starting from 1997 to 2004 done by Alkassim (2005) indicates that bank size has a negative influence on the profitability of Islamic and Conventional banks in GCC. This means that bigger Conventional banks are less profitable. Hassene and Kais (2016) from their study found that bank size has a negatively significant impact on profitability for both Islamic and Conventional banks in Malaysia.

According to the previous studies, there is a significant but inconsistent relationship between bank size and profitability. Hence, bank size is included in this research conceptual framework and to be tested on the profitability of Islamic and Conventional banks in Malaysia.

2.2.3 Liquidity

Liquidity ratio is one of the bank-specific factors to measure bank's profitability. Liquidity refers to a firm's ability to meet its short run obligations, commonly a year or less (Maysa'a and Rasha, 2015). A number of proxies on the relationship of liquidity such as total financing to total deposit and total loan to total asset were studied. Liquidity ratio enables to determine a percentage of assets that comprise the loan portfolio.

Bashir (2003) studied 14 Islamic banks from eight different countries for the period from 1993 to 1998. In this study, they analyzed internal factors impact towards profitability, and they found that liquidity has a positive relationship with profitability. Hassan and Bashir (2003) on the other hand study on the relationship between internal determinant towards profitability of 39 Islamic banks from 21 countries for the period from 1994 to 2001 found that liquidity has a negative and significant impact on profitability. This indicates that an increase in liquidity leads to a decreasing in the profitability of Islamic banks.

Kosmidou et al. (2005) evaluate the impact of bank characteristics on the average return on assets (ROA) for the commercial banks in Britain. From the study, liquidity was found to be positively related to the ROA. On the other hand, Molyneux and Thorton (1992) examined the determinants of bank profitability for a panel of 18 European countries for the 1986 to 1989 time period found that there is a negative correlation between liquidity and profitability levels. Higher liquidity, greater provisions for loan losses and more reliance on debt has been lower indicative of lower bank profits (Olson and Zoubi, 2011).

According to Muni and Fayza (2013) who studied the profitability of 27 Islamic and 65 Conventional banks in GCC for the period from 2006 to 2009 reveal that there is no significance difference between Islamic and Conventional banks. Both Islamic and Conventional banks showed a positively significant relationship between liquidity and the profitability. Ansari and Rehman (2010) and Suzanna and Ola (2015) who studied a financial performance of Islamic banks and Conventional

banks also found that liquidity has a positive significant relationship with the profitability of Islamic and Conventional banks.

There is a significant relationship between liquidity and profitability but with different impact. Hence, liquidity is included in this research conceptual framework and to be tested on the profitability of Islamic and Conventional banks in Malaysia.

2.2.4 Deposit

Deposit is considered as bank's liability. Customers make current, fixed or saving deposits in banks. It is considered as bank liabilities because they must be repaid back to the depositors. Banks invest these deposits in other projects and generate profits on them. Therefore, deposits of the banks are considered the primary source of bank funding and it has an impact on the banks' profit (Muhamad et al., 2013).

According to Ali et al. (2017) who examined the profitability of Islamic bank in Yemen for the period 2010 to 2014 indicates that deposit has a positive significant impact on the profitability of Islamic bank in Yemen. Other than that, Muhamad Muda et al., (2013) analyzed the determinants of profitability of Islamic bank and the impact of the global financial crisis on the profitability over the period of 2007 to 2010 indicates that deposit ratio has a positive significant impact in determining the profitability of Islamic banks in Malaysia.

HirinduKawshala and KushaniPanditharathna (2017) investigate the factors affecting bank profitability in Sri Lankan domestic commercial banks for the period 2011 to 2015. Regression findings reveal that deposit ratio has a positive significant

relationship with the banks' profitability. Besides, Shah and Khan (2017) study the factors affecting commercial banks profitability in Pakistan found that deposit has a positive and significant impact on banks profitability.

According to Ramlan and Adnan (2016) who studied the profitability of Islamic and Conventional banks in Malaysia over the period of 2006 to 2011 indicates that deposit has a positively significant impact on profitability for the Conventional bank but the negative significant impact on Islamic banks.

There is a mixed relationship between deposit and profitability. The result from the previous studies shows that there is a positive and negative relationship between deposit and profitability. Hence, the deposit is included in this research conceptual framework and to be tested on the profitability of Islamic and Conventional banks in Malaysia.

2.3 Related Theory

There are one (3) theories that have been considered in this research, Structure Conduct Performance, Signaling theory and Financial Intermediation theory when developing research conceptual framework. The details of these theories are described offered in the subsection 2.3.1 to 2.3.3.

2.3.1 Structure Conduct Performance Theory

Structure conduct performance (SCP) is proposed by Mason (1939) and later has been modified by Bain (1951). This theory states that when firms have a large percentage of market shares it could increase bank concentration level and fosters

competition among firms in the industry. When the market is concentrated in the hands of several firms, the possibility of collusive behavior will be increases. The higher the market concentration ratio, the higher the profitability of the firms (Gilbert, 1984). The SCP reveals that the performance of the bank depends on several elements of market concentration, market structure, number and size of the banks, and collusion. Firms will make more profit in the concentrated market rather than in a less concentrated market (Lloyad-William et al, 1994).

2.3.2 Signaling Theory

The signaling hypothesis indicates that asymmetric information allows managers to have better information than outsiders about future cash flows. Therefore, managers expect to signal this information through capital structure decisions. According to the signaling equilibrium, if banks expect to improve their profitability, they should have higher capital, because the capital ratio of bank determines the capacity of a bank to absorb unexpected losses. In theory, an excessively high capital ratio implies that a bank operates conservatively and ignores some potential investment opportunities.

2.3.3 Financial Intermediation Theory

This theory was developed by Diamond (1984). Financial intermediation acts an agency between the two groups. According to Santos (2001), there would be no need for financial intermediaries if not for frictions that exist in the capital market. This presupposes that within a perfect capital market of Modigliani and Miller (1958) where there is no information asymmetry, transaction costs, taxes and monitoring costs; savers and borrowers would be able to interact effectively and fully allocate resources with no costs. This rational informs the traditional theory of financial intermediation. Santomero

(1984) and Bhattacharya and Thakor (1993) argue that the existence of transaction costs and information asymmetry justifies the existence of financial intermediaries like banks.

According to Douglas (2015), banks as financial intermediaries are able to overcome the issues faced by individuals in the capital market through the following functions: (1) *Liquidity Transformation*: This is the transformation process of using short-term debts like deposits to finance long-term investments. Therefore, they are able to meet the high liquidity needs of depositors while holding relatively illiquid and risky assets. They achieve this through diversification of their portfolio risk unlike savers who hold relatively undiversified portfolio. (2) *The brokerage function*: banks serve as a one-stop shop to match savers and lenders. As a result, they are able to significantly reduce transaction and information costs for the lenders and savers.

2.4 Summary

In this chapter, the researcher had discussed on the literature review of the study. It is briefly explained on the concept of profitability which is the dependent variable for this study. Besides, the relationship between dependent and independent variables are also reviewed by the researcher.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter discusses the research design and methodology of this study. Started with research framework followed by hypotheses development, research design, operational definition, measurement of variables, and data collection method which include sampling, data collection procedures and techniques of data analysis.

3.1 Research Framework

Sekaran and Bougie (2010) defined a theoretical framework as a conceptual model that gives details network of the relationship between the determinants that have been recognized as vital to the problem.

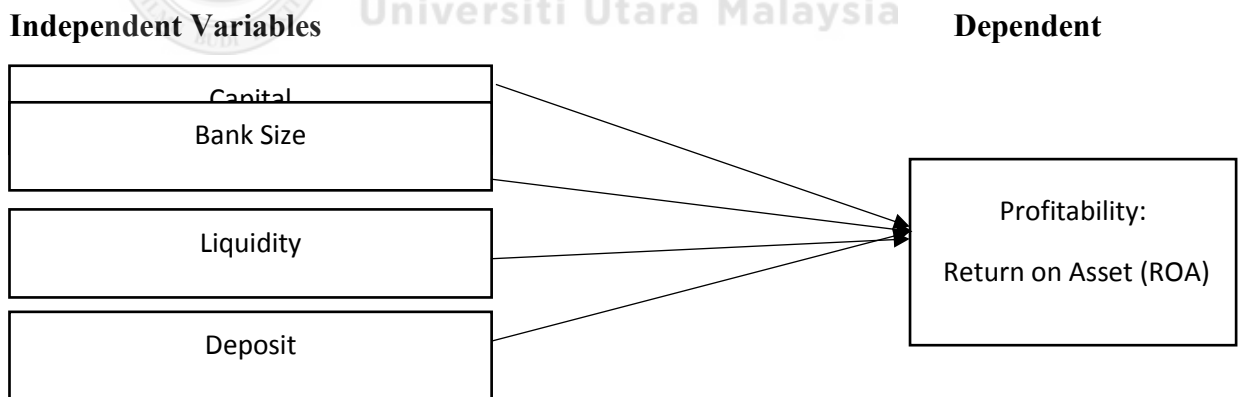


Figure 3.1
Theoretical Framework
Source: Adopted from the previous studies

Figure 3.1 shows the theoretical framework which consists of the dependent variable and independent variables. Profitability is determined as the dependent variable while the independent variable includes; capital, bank size, liquidity, and deposit. This model is adapted from the previous study on the profitability of banks.

3.2 Hypotheses Development

The hypothesis is defined by Zikmund et al. (2010) as a statement of the relationship between two or more variables. It relates one variable with the other and it is always in declarative sentence form. Hypothesis guides and keeps the research on the main line of the study.

The researcher developed the hypotheses for this study in regards with the theories that evolved in this study and the relationship between independent and dependent variables. There are four independent variables which are capital, bank size, liquidity and deposit and profitability as the dependent variable. The development of the hypotheses are as follows:

H₀₁: There is no significant relationship between capital and profitability.

H_{a1}: There is a significant relationship between capital and profitability.

H₀₂: There is no significant relationship between bank size and profitability.

H_{a2}: There is a significant relationship between bank size and profitability.

H₀₃: There is no significant relationship between liquidity and profitability.

H_{a3}: There is a significant relationship between liquidity and profitability.

H₀₄: There is no significant relationship between deposit and profitability.

H_{a4}: There is a significant relationship between deposit and profitability.

3.3 Research Design

Research design can be defined as a systematic plan to study a scientific problem.

Zikmund (2000) stated that research design known as a master plan for the research.

It is a framework for the purpose to conduct research that describes the method and procedures involved in the study besides analyzing the information needed.

The deductive approach will be applied in order to answer the research questions and to meet the objectives. Thus, quantitative research method is found to be more suitable for this study (Gabriel, 2013). Quantitative research is the measurement of amount or quantity and the result is presented in a set of numbers (Rajasekar et al, 2013).

As the researcher chooses to collect data the bank's financial statements, the secondary data have been employed in this study in order to examine the profitability of Islamic and Conventional banks in Malaysia. Malhotra and Birks (1999) defined secondary data as the data collected for some reason other than the issue in hand. The secondary data was collected from the already existing annual reports, published magazines, journals, company records, and internet.

3.4 Operational Definition and Measurement

For this study, the researcher measures dependent and independent variables to answer the research question and to meet the research objectives. There are four (4) bank-specific factors namely capital, bank size, liquidity and deposit that will be tested in this study to examine their impact on the bank's profitability. The operation definition of the dependent and independent variable is discussed in the following subsection. Table 3.1 presented the summary of definition and measurement of this study.

3.4.1 Dependent Variable

The dependent variable for this study is a return on asset (ROA). ROA is used as a proxy to determine bank profitability. ROA measures the ability and efficiency of banks using its assets to generate profit (Manar, 2014). Higher ROA generally shows the greater ability of bank in converting its assets into earnings. This indicates that the higher the ROA, the better the performance of the banks. Following Abduh and Idrees (2013), and Mohamad et al., (2015), ROA is chosen as the dependent and is measured as follows:

$$\text{ROA} = \text{Net income} / \text{Total Asset}$$

3.4.2 Independent Variables

3.4.2.1 Capital (ETA)

Capital (ETA) is used as a proxy to capitalization. ETA is a computation that indicates the financial strength of a company. A higher ratio of ETA refers to the ability of the bank's current capital to support the further assets growth (Anupam and

Ganga, 2017). In line with Wasuizzaman and Hanimas (2010) and Kamaruddin and Mohd (2013), ETA is measured as follows:

$$\text{ETA} = \text{Total Equity} / \text{Total Asset}$$

3.4.2.2 Bank Size

Used as a proxy to measure the size of the bank. In the literature, the relationship between size and profitability has been mixed. The size of the banks may affected the profitability of bank positively (Ali et al., 2017; San and Heng, 2013). Bank size is measured by:

$$\text{SIZE} = \text{natural logarithm of Total Asset (LNTA)}$$

3.4.2.3 Liquidity

Liquidity ratios measure the bank capability to fulfill its short-term obligations. It also describes the total amount of debt relative to assets. The higher the ratio means the bank is less liquid. Following Sanaullah Ansari and Atiqa Rehman (2010) and Suzanna and Ola (2015), LIQR is measured by:

$$\text{LIQR} = \text{Loans (or financings)} / \text{Total Assets}$$

3.4.2.4 Deposit

Deposits ratio is total deposits from banks and other financial institutions as a percentage of total assets. Deposits of the banks are considered the main source of bank funding and hence, it has an impact on the bank's profitability (Muhamad et al., 2013). In line with Ramlan and Adnan (2016) and Ali et al., (2017). DTA is measured by:

$$\text{DTA} = \text{Deposit} / \text{Total Asset}$$

Table 3.1

Summary of Operational Definition and Measurement of Variables

Variables	Measurement	Notation	Expected Sign
<u>Dependent Variables</u>			
Return on Asset	Net income/ Total Asset	ROA	N/A
<u>Independent</u>			
<u>Variables</u>	Total Equity/Total Asset	ETA	+
Capital			
Bank Size	natural logarithm of Total Asset	SIZE	-
Liquidity	Loans (or financings)/ Total Assets	LIQR	+
Deposit	Deposit/ Total Asset	DTA	+

3.5 Data Collection

The collection of data for this study is discussed in the following sections which include data sources, population and data collection method.

3.5.1 Data Sources

This study used secondary data which the sources of the data for analyzing the variables for the period of 2008 to 2016 is derived from the annual financial report obtained from Fitch Connect database. This period was chosen because considering the time after the global financial crisis.

3.5.2 Sample

The sample of this study consists of all 16 licensed Islamic banks and 22 selected licensed Conventional banks of Malaysia under Bank Negara Malaysia (refer Table 3.2 and Table 3.3). The financial data is obtained from the financial report of the respected banks. Therefore, the researcher must look precisely for each bank either there has appropriate data to support the findings later.



Table 3.2
List of Islamic banks in Malaysia

Islamic Banks		
No.	Name	Ownership
1	Affin Islamic Bank Berhad	Local
2	Al Rajhi Banking & Investment Corporation (Malaysia) Berhad	Foreign
3	Alliance Islamic Bank Berhad	Local
4	AmBank Islamic Berhad	Local
5	Asian Finance Bank Berhad	Foreign
6	Bank Islam Malaysia Berhad	Local
7	Bank Muamalat Malaysia Berhad	Local
8	CIMB Islamic Bank Berhad	Local
9	HSBC Amanah Malaysia Berhad	Foreign
10	Hong Leong Islamic Bank Berhad	Local
11	Kuwait Finance House (Malaysia) Berhad	Foreign
12	Maybank Islamic Berhad	Local
13	OCBC Al-Amin Bank Berhad	Foreign
14	Public Islamic Bank Berhad	Local
15	RHB Islamic Bank Berhad	Local
16	Standard Chartered Saadiq Berhad	Foreign

Source: BNM

Table 3.3

List of Conventional banks in Malaysia

Commercial Banks		
No.	Name	Ownership
1	Affin Bank Berhad	Local
2	Alliance Bank Malaysia Berhad	Local
3	AmBank (M) Berhad	Local
4	BNP Paribas Malaysia Berhad	Foreign
5	Bangkok Bank Berhad	Foreign
6	Bank of America Malaysia Berhad	Foreign
7	Bank of China (Malaysia) Berhad	Foreign
8	CIMB Bank Berhad	Local
9	Citibank Berhad	Foreign
10	Deutsche Bank (Malaysia) Berhad	Foreign
11	HSBC Bank Malaysia Berhad	Foreign
12	Hong Leong Bank Berhad	Local
13	India International Bank (Malaysia) Berhad	Foreign
14	Industrial and Commercial Bank of China (Malaysia) Berhad	Foreign
15	Malayan Banking Berhad	Local
16	Mizuho Bank (Malaysia) Berhad	Foreign
17	National Bank of Abu Dhabi Malaysia Berhad	Foreign
18	OCBC Bank (Malaysia) Berhad	Foreign
19	Public Bank Berhad	Local
20	RHB Bank Berhad	Local
22	Standard Chartered Bank Malaysia Berhad	Foreign
22	United Overseas Bank (Malaysia) Bhd.	Foreign

Source: BNM

3.5.3 Data Analysis

The collected data is analyzed using descriptive analysis and regression analysis. Meanwhile, correlation analysis is conducted to find if there is the existence of multicollinearity among the variables. The econometrics analysis of panel data using EVIEWS 9 program is used to perform the all the tests and to generate the regression results.

3.5.3.1 Descriptive Statistic

Descriptive statistic includes the mean and standard deviation (Dawood, 2014). The mean values refer to the average value for each variable in the sample of the study. Standard deviation demonstrates the data variation from the mean value (Almazari, 2014).

3.5.3.2 Correlation Analysis

The correlation matrix shows the expected coefficient signs from the regression. Correlation analysis is employed to see the strength of the correlation between the dependent and independent variables data. According to Green et al. (1998), it is suggested that 0.9 and 0.7 as bivariate threshold correlations for the hazardous effect of collinearity.

3.5.3.3 Multiple Regression Analysis

According to Hair et al. (2006), multiple regression analysis is defined as a statistical technique used to determine the relationship between independent variables and dependent variable. The coefficient of the individual independent variable is used to predict the tendency of each independent variable. The purpose of this study employs

multiple regression analysis is to prove the hypotheses and the control variable. This test helps the researcher to achieve the objective of this study which is to examine the impact of bank-specific factors on the profitability of Islamic and Conventional banks.

3.5.3.4 Fixed Effect Model

The researcher employs the Fixed Effect Model (FEM) in multiple regression in determining the relationship between independent variables and dependent variable for this study. According to Sufian (2009), FEM appears to be unbiased and constant evaluations of the coefficients. This model is chosen because it is found to be a most suitable model to be applied in single sampling country. Reyna (2007) assert that FEM is suitable to use in investigating the relationship of predictor and outcome variables within single entity likely as individual, company or country. Besides, Batlagi (2000) and Gelman (2004) stated that FEM is relevant to be employed in specific organization study. There is also numerous study on examining the profitability in single country applied FEM namely, Aziz (2017) in Malaysia, Obamuyi (2013) in Nigeria and Aslam et al. (2016) in Pakistan.

3.5.3.5 Model Specification of Multiple Regression Analysis

A linear regression is employed in this study to examine the impact of bank-specific factors on the profitability of Islamic and Conventional banks. The regression equations for this study are as follows:

$$ROA_{it} = \alpha + \beta_1 ETA_{it} + \beta_2 SIZE_{it} + \beta_3 LIQR_{it} + \beta_4 DTA_{it} + \varepsilon_{it}$$

Where,

Dependent variable: ROA= Profitability

Independent variables:

ETA= Capital

SIZE= Bank Size

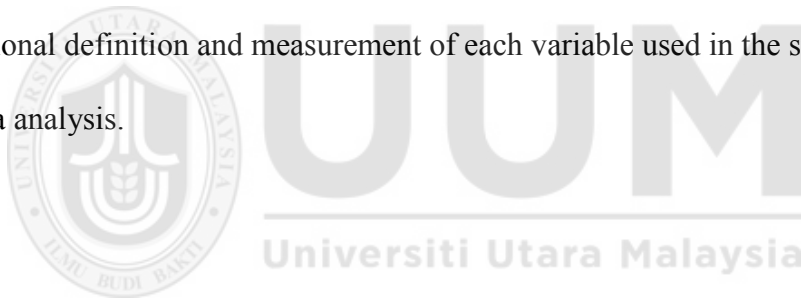
LIQR= Liquidity

DTA= Deposit

α = intercept, β is regression coefficient, ε is represent of error term.

3.6 Summary

In this chapter, the researcher had discussed the methodology used in order to answer the research questions and to meet the research objectives. The researcher had briefly explained on the research framework, hypotheses development, research design, operational definition and measurement of each variable used in the study and lastly on data analysis.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

In this chapter, the results of this study will be discussed. This chapter started with a discussion on descriptive statistics of the studied variables in Section 4.1. It followed by analysis of the correlation between variables and the results of the analysis include of multiple regression tests of the direct relationship between dependent variable and independent variables are presented and discussed in Section 4.2 to 4.3 respectively.

4.1 Descriptive Statistics of Variables

Descriptive statistics explains the basic features of the data in this study. The objective of these statistics is to give an overall description of the dataset. Table 4.1 below shows the descriptive result of the variables for Islamic banks in Malaysia. Meanwhile, Table 4.2 presents the descriptive result of the variables for Conventional banks in Malaysia. Table 4.3 present the descriptive result of variables for Islamic and Conventional banks in Malaysia. In descriptive statistic, mean refers to the average value of each variable in the study sample while the standard deviation shows the data variation from the mean value.

Table 4.1

Descriptive Statistics of Variables for Islamic Banks in Malaysia.

Variable s	Mean	Std. Deviation	Skewnes s	Kurtosi s	N
ROA	0.0212	0.0096	-1.8354	16.2214	144
ETA	0.0867	0.0441	2.4350	11.5753	144
SIZE	7.1715	0.4142	0.1117	2.7262	144
LIQR	0.5960	0.1424	-1.5485	6.2916	144
DTA	0.0080	0.0144	2.3806	9.1190	144

Table 4.1 shows the descriptive statistics of the dependent variables and the independent variables of Islamic banks in Malaysia. The dependent variable is ROA, the independent variables are ETA, SIZE, LIQR, and DTA. The result indicated that the mean for ROA for 144 Islamic banks in Malaysia over the study period is 0.0212. The standard deviation of 0.0096 also shows that ROA of Islamic banks in Malaysia varied slightly between individual banks.

As for the independent variables, the mean value for ETA is 0.0867 while the standard deviation value is 0.0441. Besides, the mean value for SIZE is 7.1715 which is the higher mean and its standard deviation value is 0.4142. For LIQR, the mean value is 0.5960 and standard deviation value is 0.1424. Meanwhile, the mean value for DTA is 0.0080 and the standard deviation value is 0.0144. The above result shows that SIZE has the highest standard deviation (0.4142) which indicates that there is a huge gap between the amounts of total asset owned by different banks.

Following the rules of thumb written by Sekaran (2013), if the residuals normally distributed, the skewness value would be zero, or it can be tolerated from -0.5 to 0.5. For most of the variables, the value is above zero, so it has positive skewness, and just two of the variables (ROA and LIQR) exhibit negative values. Regarding kurtosis, normally distributed residuals should have a value equal or less than three. If greater than 3 then the dataset has heavier tails normal distribution. In this case, only SIZE was found are normally distributed or very close to normal distribution.

Table 4.2
Descriptive Statistics of Variables for Conventional Banks in Malaysia.

Variables	Mean	Std. Deviation	Skewness	Kurtosis	N
ROA	0.0312	0.0208	5.0983	35.2725	183
ETA	0.1824	0.2203	2.6149	8.5942	183
SIZE	7.3721	0.8015	-0.6639	3.1178	183
LIQR	0.8901	1.7830	4.1103	18.2698	183
DTA	0.0500	0.1051	3.8463	18.7729	183

Table 4.2 shows the descriptive statistics of the dependent variables and the independent variables for Conventional banks in Malaysia. The result shows that the mean for ROA for 183 Conventional banks in Malaysia over the period of 2008 to 2016 is 0.0312. The standard deviation of 0.0208 also shows that ROA of Conventional banks in Malaysia varied slightly between individual banks.

As for the independent variables, the mean value for ETA is 0.1824 while the standard deviation value is 0.2203. Besides, the mean value for SIZE is 7.3721 which is the higher mean and its standard deviation value is 0.8015. For LIQR, the mean value is 0.8901 and standard deviation value is 1.7830. Meanwhile, the mean value for DTA is 0.0500 and the standard deviation value is 0.1051. The above result shows that LIQR has the highest standard deviation (1.7830) which indicates that there is a huge gap between the amounts of total loan owned by different banks.

In measuring skewness, it is found that only ROA, ETA, and DTA were positively scattered. Regarding kurtosis, normally distributed residuals should have value equal or less than three. In this case, no variables were found normally distributed or very close to normal distribution.

Table 4.3

Descriptive Statistics of Variables for Islamic and Conventional Banks in Malaysia.

Islamic Banks				Conventional Banks		
Variables	Mean	Std. Dev	N	Mean	Std. Dev	N
ROA	0.0212	0.0096	144	0.0312	0.0207	183
ETA	0.0867	0.0441	144	0.1824	0.2203	183
SIZE	7.1715	0.4142	144	7.3721	0.8015	183
LIQR	0.5960	0.1424	144	0.8901	1.7830	183
DTA	0.0080	0.0144	144	0.0500	0.1051	183

Table 4.3 shows descriptive statistics of all the variables for both Islamic and Conventional banks in Malaysia. ROA of Islamic banks is 0.0212 which is lower than that of Conventional banks at 0.0312, reveals that managerial efficiency in Conventional banks is higher since their assets can generate higher returns than Islamic banks. This shows that Conventional banks are more profitable and is in line with the findings from Al-Mamun (2014) which stated that Conventional banks are more profitable than Islamic banks in Malaysia.

Looking at capital (ETA), Conventional banks are better capitalized (0.1824) than Islamic banks (0.0867). The difference of 0.0957 is quite substantial. This result is consistent with the findings of Ramlan (2016).

As for the bank size (SIZE), Conventional banks have a larger size of the total asset (7.3721) compared to Islamic banks (7.1715). For the liquidity, the Conventional banks are more illiquid than the Islamic banks. On the average, 0.8901 of the total assets of Conventional banks are tied up in loans compared to 0.5960 for Islamic banks. Finally, deposit for Islamic bank is lower than Conventional bank regarding the comparison of their mean. The mean of deposit for Islamic bank is 0.0080 while for a Conventional bank the mean is 0.0500.

4.2 Correlation between Variables

The study employed correlation matrix. The main objective of the correlation matrix is to find the existence of multicollinearity among the variables. A rule of thumb by Gujarati and Porter (2009) assert that for multicollinearity to be a major issue is if the pairwise correlation coefficient between two regressors is in a surfeit of 0.8. The result displayed in Table 4.4 and Table 4.5 shows that there was no evidence of such

high correlation. The highest for Islamic banks was between ETA and SIZE (-0.5404). While for Conventional banks, the highest was between ETA and LIQR (0.6786).

Table 4.4
Correlation Matrix for Islamic banks in Malaysia.

	ROA	ETA	SIZE	LIQR	DTA
ROA	1				
ETA	-0.0627	1			
SIZE	0.1372	-0.5404	1		
LIQR	0.1008	-0.0376	0.3884	1	
DTA	-0.256	0.1369	0.1369	-0.0702	1

Table 4.5
Correlation Matrix for Conventional banks in Malaysia.

	ROA	ETA	SIZE	LIQR	DTA
ROA	1				
ETA	0.4201	1			
SIZE	0.0331	-0.5909	1		
LIQR	0.6439	0.6786	-0.0495	1	
DTA	-0.1482	0.3716	-0.4431	-0.1463	1

4.3 Multiple Regression Analysis

The fixed effect regression analysis is performed using EVIEWS 9 software to determine the projecting influence of independent variables (ETA, SIZE, LIQR, DTA) on the dependent variable (ROA). The result of fixed effect regression analysis for Islamic banks is presented in Table 4.6 and Conventional banks in Table 4.7 respectively. The beta coefficient value (β) shows the contribution of each independent variable to the dependent variable. Meanwhile, the expected sign of coefficient showed is extracted from the previous studies in regards to profitability of Islamic and Conventional banks.

Table 4.6
Bank-specific Factors on Return of Asset (ROA) of Islamic Banks in Malaysia.

Variable	Expected signs	Beta Coefficient	t-statistics	p-value
ETA	+	0.0578	3.1330	0.0022***
SIZE	-	-0.0004	-0.1150	0.9086
LIQR	+	0.0013	0.6370	0.5253
DTA	+	-0.0775	-2.9464	0.0038***
R ²	0.6062			
Adjusted R ²	0.5459			
F-Statistics	10.0480			
Sig F-Statistics	0.0000			
N	144			

Note: *p<0.10, **p<0.05, ***p<0.01

The result of the multiple regressions for Islamic banks is presented in Table 4.6. The

F-statistic explains that the overall significance of the model is found to be significant at 0.000 levels with adjusted R-squared of 0.5459. It shows that regression model consisting of ETA, SIZE, LIQR, and DTA could explain 54.59% changes in ROA. There are two variables which are found to be significant that is, capital (ETA) and deposit (DTA) which are having a statistically significant impact on return on asset (ROA) of Islamic banks in Malaysia and supporting the hypotheses. Other predictors such as, liquidity (LIQR) and bank size (SIZE) have no impact on return on asset (ROA) of Islamic bank in Malaysia which is not supporting the hypotheses. Details of the result are presented in Appendix II.

4.3.1 Bank-specific factors for Islamic banks in Malaysia

The results of these variables are discussed in the following sections.

(i) Capital (ETA)

The coefficient estimation of ETA is 0.0578 with t-value of 3.1330 ($p < 0.01$). This result indicates that a 0.0578 point increase in ETA, resulted in an increase of 1 point in return on asset (ROA) of Islamic banks in Malaysia. The result shows that there is a positive and significant relationship between ETA and return on asset. The result reject null hypothesis H_{01} .

(ii) Bank Size (SIZE)

The coefficient estimation of SIZE is -0.0004 with t-value of -0.1150 ($p > 0.10$). This result indicates that a 0.0004 point increase in SIZE, resulted a decrease of 1 point in return on asset (ROA) of Islamic banks in Malaysia. The result shows that there is an

insignificant relationship between SIZE and ROA. The result fails to reject null hypothesis H_{02} .

(iii) Liquidity (LIQR)

The coefficient estimation of LIQR is 0.0013 with t-value of 0.6370 ($p > 0.10$). This result indicates that a 0.0013 point increase in LIQR, resulted an increase of 1 point in return on asset (ROA) of Islamic banks in Malaysia. The result shows that there is an insignificant relationship between LIQR and ROA. The result fails to reject null hypothesis H_{03} .

(iv) Deposit (DTA)

The coefficient estimation of DTA is -0.0775 with t-value of -2.9464 ($p < 0.01$). This result indicates that a 0.0775 point increase in DTA, resulted a decrease of 1 point in return on asset (ROA) of Islamic banks in Malaysia. The result shows that there is a negative and significant relationship between DTA and return on asset. The result reject null hypothesis H_{04} . The result contradicts with the expected sign which indicates that deposit would show a positive effect on the profitability. This maybe due to deposits are still liabilities for the bank. If defaults occur in loan repayment, banks may not have abilities to repay depositors. High liquidity pressure leads to operation inefficiency and reduces profits.

Table 4.7

Bank-specific Factors on Return of Asset (ROA) of Conventional Banks in Malaysia.

Variable	Expected signs	Beta Coefficient	t-statistics	p-value
ETA	+	-0.0070	-0.9318	0.3529
SIZE	-	-0.0131	-7.5583	0.0000***
LIQR	+	0.0104	2.8824	0.0045***
DTA	+	-0.0157	-2.4482	0.0155**
R ²	0.8825			
Adjusted R ²	0.8638			
F-Statistics	47.1773			
Sig F-Statistics	0.0000			
N	183			

Note: *p<0.10, **p<0.05, ***p<0.01

The result of the multiple regressions for Conventional banks is presented in Table 4.7. The F-statistic explains that the overall significance of the model is found to be significant at 0.000 levels with adjusted R-squared of 0.8638. It shows that regression model consisting of ETA, SIZE, LIQR, and DTA could explain 86.38% changes in ROA. There are three variables which are found to be significant that is, bank size (SIZE), liquidity (LIQR) and deposit (DTA) which are having a statistically significant impact on return on asset (ROA) of Conventional banks in Malaysia and supporting the hypotheses. Other predictors such as, bank size (SIZE) have no impact on return on asset (ROA) of the Conventional bank in Malaysia which is not supporting the hypotheses. Details of the result is presented in Appendix III.

4.3.2 Bank-specific factors for Conventional banks in Malaysia

The results of these variables are discussed in the following sections.

(i) Capital (ETA)

The coefficient estimation of ETA is -0.0070 with t-value of -0.9318 ($p > 0.10$). This result indicates that a 0.0070 point increase in ETA, resulted in a decrease of 1 point in return on asset (ROA) of Conventional banks in Malaysia. The result shows that there is an insignificant relationship between ETA and ROA. The result fails to reject null hypothesis H_{01} .

(ii) Bank Size (SIZE)

The coefficient estimation of SIZE is -0.0131 with t-value of -7.5583 ($p < 0.01$). This result indicates that a 0.0131 point increase in SIZE, resulted in a decrease of 1 point in return on asset (ROA) of Conventional banks in Malaysia. The result shows that there is a negative and significant relationship between SIZE and return on asset. The result reject null hypothesis H_{02} .

(iii) Liquidity (LIQR)

The coefficient estimation of LIQR is 0.0104 with t-value of 2.8824 ($p < 0.01$). This result indicates that a 0.0104 point increase in LIQR, resulted in an increase of 1 point in return on asset (ROA) of Conventional banks in Malaysia. The result shows that there is a positive and significant relationship between LIQR and return on asset. The result reject null hypothesis H_{03} .

(iv) Deposit (DTA)

The coefficient estimation of DTA is -0.0157 with t-value of -2.4482 ($p < 0.05$). This result indicates that a 0.0157 point increase in DTA, resulted a decrease of 1 point in return on asset (ROA) of Conventional banks in Malaysia. The result shows that there is a negative and significant relationship between DTA and return on asset. The result reject null hypothesis H_{04} .

4.4 The Summary of the Result of the Relationship between Bank-Specific Factors and Profitability of Islamic and Conventional Banks in Malaysia

To summarize the result regards to the hypotheses related to the predictive power of bank-specific variables on return on asset of Islamic banks in Malaysia, it can be concluded that the given hypotheses H_{a1} and H_{a4} are significant. While for Conventional banks in Malaysia, it can be concluded that, H_{a2} , H_{a3} and H_{a4} are significant.

Table 4.8

Summary of the Multiple Regression Result of Bank-Specific Factors on Profitability of Islamic Banks in Malaysia

Independent Variables	Expected Sign	ROA
ETA	+	Significant (+)
SIZE	-	Insignificant (-)
LIQR	+	Insignificant (+)
DTA	+	Significant (-)

Table 4.8 shows that two (2) independent variables (ETA and DTA) have a significant value with the dependent variable (ROA) of Islamic banks. There are two (2) independent variables were found to be not significant with the dependent variables. Hence, the researcher develops the multiple linear regression as follows:

$$\text{ROA} = 0.0193 + 0.0578\text{ETA}_{nt} + 0.0004\text{SIZE}_{nt} + 0.0013\text{LIQR}_{nt} - 0.0775\text{DTA}_{nt} + \varepsilon_{nt}$$

From the equation above, it can be interpreting that 1 unit increase in capital, 0.0578 unit will increase in profitability. While 1 unit increase in deposit, 0.0775 unit will decrease in profitability in Islamic banks in Malaysia. Therefore, from the analysis, shows that the most influential determinants of Islamic banks profitability are capital and deposit.

Table 4.9

Summary of the Multiple Regression Result of Bank-Specific Factors on Profitability of Conventional Banks in Malaysia

Independent Variables	Expected Sign	ROA
ETA	+	Insignificant (-)
SIZE	-	Significant (-)
LIQR	+	Significant (+)
DTA	+	Significant (-)

Table 4.9 shows that three (3) independent variables (SIZE, LIQR and DTA) have a significant value with the dependent variable (ROA) of Conventional banks. There are one (1) independent variables were found to be not significant with the dependent variables. Hence, the researcher develops the multiple linear regression as follows:

$$\text{ROA} = 0.1203 - 0.0070\text{ETA}_{nt} - 0.0131\text{SIZE}_{nt} + 0.0104\text{LIQR}_{nt} - 0.0157\text{DTA}_{nt} + \varepsilon_{nt}$$

From the equation above, it can be interpreting that 1 unit increase in bank size, 0.0131 unit will decrease in profitability. While 1 unit increase in liquidity, 0.0104 unit will increase in profitability and 1 unit increase in deposit, 0.0157 unit will decrease in profitability of Conventional banks in Malaysia. Therefore, from the analysis, shows that the most influential determinants of Conventional banks profitability are bank size, liquidity and deposit.

4.5 Summary

This chapter discussed the result of three main methods used which is descriptive statistics, correlation analysis and multiple regression analysis. The descriptive analysis shows the normality behavior of the variables and the profitability of Islamic and Conventional banks from 2008 to 2016. The correlation analysis was conducted to shows the relationship between the bank-specific factors and profitability. Lastly, the multiple regression analysis was done to shows the impact of the bank-specific factors on the profitability of Islamic and Conventional banks.



CHAPTER FIVE

CONCLUSION

5.0 Introduction

As for this chapter, the researcher discusses and summarizes the findings of the analysis whether it is answering the research questions and achieving the objective of this study. Other than that, the researcher also provides some recommendation for future research, discusses on the contribution of the study as well as the conclusion.

5.1 Discussion on the result

The comparative analysis between Islamic and Conventional banks and the summary of the results obtained from the multiple regressions of Islamic and Conventional banks in Malaysia are presented in Table 5.1.

Based on Table 5.1, the independent variables have a greater impact on ROA of Malaysian Conventional banks ($R^2=0.8825$) compared to those Malaysian Islamic banks ($R^2=0.6062$). In other words, the management of Conventional banks in Malaysia is encouraged to consider the impacts of these variables since they contribute 88.25 percent of their banks' profitability, particularly SIZE, LIQR and DTA.

In contrast, the independent variables collectively only explain 60.62 percent of the variation in profitability of Malaysian Islamic banks. Although there are two variables (ETA and DTA) which have a significant impact on profitability (1% respectively), the lower R^2 result appears to indicate that there are other factors

which are peculiar to Islamic banks that could explain more variation in profitability in Malaysia.

Table 5.1
Summary Result of Bank-Specific Factors Impact on Islamic and Conventional Banks Profitability

Variable	Islamic banks		Conventional banks	
	β	p-value	β	p-value
ETA	0.0578	0.0022***	-0.0070	0.3529
SIZE	-0.0004	0.9086	-0.0131	0.0000***
LIQR	0.0013	0.5253	0.0104	0.0045***
DTA	-0.0775	0.0038***	-0.0157	0.0155**
R ²		0.6062		0.8825
Adjusted R ²		0.5459		0.8638
F-Statistics		10.0480		47.1773
Sig F-Statistics		0.0000		0.0000
N		144		183

Note: *p<0.10, **p<0.05, ***p<0.01

5.1.1 Relationship between Bank-specific Factors and Profitability in Islamic and Conventional banks in Malaysia.

Based on the analysis of the four internal factors, two are significant to the profitability of Islamic banks in Malaysia and three out of four internal factors have significantly influenced on the profitability of Conventional banks in Malaysia. The subsequent paragraphs explain the individual results.

(i) Capital

There is a positive and significant relationship between ETA and profitability of Islamic banks in Malaysia. This result is consistent with the finding of Anupam and Ganga (2017) in UAE; whereby there is a significant and positive relationship between ROA and ETA. The Malaysian banks' result is also supported by Hassene and Kais (2016). These results appear to suggest that increase in capital leads to an increase in the probability of high profitability.

However, there is a negative and insignificant relationship between ETA and profitability in the case of Conventional banks. The result is in contrast with the study done by San and Heng (2013) and Khan et. al. (2011) which revealed that capital ratio impacts positively on banks' profitability.

(ii) Bank Size (SIZE)

The size variable proxy as a log of total assets has a negative and insignificant relationship on profitability for Islamic banks. This result is in contrast with the study done by Ali et al. (2017), Aziz (2017) and Idris et al. (2011) which revealed that bank size is the main factor in explaining profitability and the larger the size of the bank, it will basically have better access to capital markets, unburdened with high borrowing cost and ability to generate higher returns with a large amount of asset.

However, SIZE was found to be negatively significant with profitability for Conventional banks in Malaysia. The result indicated that increase in bank size, decrease the profitability of Conventional banks. The result is consistent with study done by Alkassim (2005) in GCC and Hassene and Kais (2016) in Malaysia.

(iii) Liquidity (LIQR)

While Malaysian Islamic banks experienced the negative relationship between LIQR and profitability but not significant, Conventional banks show that the result is consistent with the study done by Kosmidou (2005), they found out that LIQR has a positive impact on profitability. This is supported by Muni and Fayza (2013), they found out that liquidity is significantly positively related to the profitability. The contrasting result highlights the different nature of Islamic banking and Conventional liquidity management whereby for Islamic banks, liquid assets are still limited.

(iv) Deposit (DTA)

There is a negative and significant relationship between DTA and profitability of Islamic banks and Conventional banks in Malaysia. This result shows that an increase in DTA could lead to a decrease in profit. The result for Islamic banks is similar to the study done by Ramlan and Adnan (2016) who found out that deposit is negatively related to profitability. While for the Conventional banks, the result is inconsistent with the study done by Hirindu and Kushani (2017) which indicates that deposit ratio has a positive significant relationship with Conventional banks profitability.

5.2 Recapitulation of the Findings

To recapitulate, the findings are shown based on the sequence of three research objectives as follows:

5.2.1 Objective 1

The first objective of this study is to examine the impact of bank-specific factors (ETA, SIZE, LIQR and DTA) on the profitability of Islamic banks. The result is presented in Table 4.6 (refer page 39).

The coefficient estimation result of ETA is highly positively related to the profitability of Islamic banks in Malaysia. The result indicates that ETA is a significant determinant and may contribute to an increase in profitability, implying that high profitability may drive higher capital ratios since profits are a source of capital.

The regression analysis found that SIZE is negatively correlated to the profitability of Islamic banks in Malaysia, but not significant. This result implies that no relationship between bank size and the profitability of the Islamic banks.

As for the liquidity, the coefficient estimation result shows that the relationship is positive to the profitability of Islamic banks, but not significant. This result suggests that there is no relationship between liquidity and profitability of Islamic banks in Malaysia.

There is a highly significant and negative relationship between deposit and profitability of Islamic banks. This result indicates that the higher the deposit ratio of Islamic bank could lead to a less profitability. This result is also supported by Ali et al. (2017) and Muhamad Muda et al. (2013).

As a summary, two variables are found to be significant with the profitability of Islamic banks in Malaysia namely ETA and DTA.

5.2.2 Objective 2

The second objective of this study is to examine the impact of bank-specific factors on the profitability of Conventional banks in Malaysia. The result is presented in Table 4.7 (refer page 42).

The regression analysis found that the coefficient of ETA is negatively correlated to the profitability of Conventional banks, but not significant. This result implies that there is no relationship between capital and profitability of Conventional banks in Malaysia.

The coefficient estimation result of bank size is negatively and significantly related to the profitability of Conventional banks in Malaysia. The result appears to suggest that the larger size of the banks not necessarily lead to an increase in profitability of Conventional banks. This result supported by Delis and Staikouras (2006) and Hassene and Kais (2016).

The relationship between liquidity and profitability of Conventional banks is found to be negatively significant. The result suggests that the larger the Conventional bank's loan portfolio is on the balance sheet, it affects the bank's profit negatively.

As for deposit, the coefficient estimation result shows that there is a negative and significant relationship between deposit and profitability of Conventional banks. The result implies that an increase in deposit ratio by one unit causes a decrease in profitability of Conventional banks in Malaysia. Demirguc-Kunt and Huzinga (1999) assert that bank that depends on deposits for their funding activities are less profitable since deposits require more branching and other expenses.

As a summary, three variables are found to be significant with the profitability of Conventional banks in Malaysia namely SIZE, LIQR, and DTA.

5.2.3 Objective 3

The third objective is to compare the bank-specific factor that mainly impacts on the profitability of Islamic and Conventional banks in Malaysia.

As for the Islamic banks, the bank-specific factor that gives a huge impact on its profitability is the capital ratio and deposit ratio. Where both variables are found to be highly significant (at level 1%) to the profitability of the Islamic banks in Malaysia.

Meanwhile, as for the Conventional banks, it is found that bank size and liquidity ratio give a huge impact on its profitability. Bank size and liquidity ratio were found

to be highly significant (at level 1%) to the profitability compared to the deposit that also found to be significant but at level 5%.

5.3 Contribution of the Study

This study extends the contributions to the theoretical aspect to enrich the existing literature by examining the profitability of Islamic and Conventional banks in Malaysia. This study also contributes evidence and knowledge for investor, depositor, regulators and those who concerned regards to this area about the factor that may affect the profitability of Islamic and Conventional banks in Malaysia.

From the result of the study, the researcher believe that this study would contributes to the Islamic and Conventional banking system in order to increase their profitability by considering the significant factor discussed. It is also useful to the bank management as well as the policy makers in providing way to generate idea in order to improve the bank's profitability.

5.4 Limitation of the Study

There limitation of this study that needs to be considered. Firstly, this study only examined the bank-specific factors that influence the profitability of the Islamic and Conventional banks and do not present the impact of macroeconomic factors towards the profitability. Second, the result established are limited to a number of annual bank transactions recorded each from 2008 to 2016.

Third, the data for this study were obtained from Fitch Connect database which is limited and only 22 out of 27 totals of Conventional banks in Malaysia published their annual financial reports. Therefore, this study does not cater all the Conventional banks in Malaysia.

5.5 Suggestion for Future Research

Pursuant to the present study, several recommendations for future research to be undertaken are suggested. Firstly, this study only focuses bank-specific factors. Thus, it is suggested for the future researcher to study for both internal and external determinants that might affect the profitability of Islamic and Conventional banks.

Second, this study only focuses on the profitability of Islamic and Conventional banks in Malaysia. Thus, it is suggested that it might be more attractive if the Malaysian Islamic and Conventional bank's profitability to be compared with a foreign country.

Lastly, due to the availability of the data, some of the Conventional banks were excluded from this study. Thus, it is suggested for the future study to include those banks if the data is available in the future.

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APPENDICES

APPENDIX I

Results of Descriptive Analysis for Islamic Banks in Malaysia

Date: 04/18/18 Time: 01:20 Sample: 2008 2016					
	ROA	CAR	SIZE	LIQUIDITY	DEPOSIT
Mean	0.021294	0.086651	7.171519	0.595964	0.007974
Median	0.020565	0.074505	7.153967	0.639455	1.42E-05
Maximum	0.048185	0.351509	8.259581	0.832519	0.077652
Minimum	-0.043267	0.031872	6.261174	0.000804	0.000000
Std. Dev.	0.009596	0.044136	0.414222	0.142406	0.014446
Skewness	-1.835365	2.434990	0.111666	-1.548530	2.380556
Kurtosis	16.22142	11.57536	2.726201	6.291608	9.119031
Jarque-Bera	1129.681	583.5205	0.749060	122.5588	360.6644
Probability	0.000000	0.000000	0.687612	0.000000	0.000000
Sum	3.066341	12.47781	1032.699	85.81880	1.148186
Sum Sq. Dev.	0.013167	0.278563	24.53591	2.899970	0.029842
Observations	144	144	144	144	144

Results of Descriptive Analysis for Conventional Banks

Date: 04/18/18 Time: 01:17 Sample: 2008 2016					
	ROA	CAR	SIZE	LIQUIDITY	DEPOSIT
Mean	0.031236	0.182397	7.372085	0.890081	0.050000
Median	0.027644	0.097051	7.602822	0.577427	0.021244
Maximum	0.194632	0.994644	8.695536	9.550673	0.723107
Minimum	0.000000	0.051638	4.346685	0.000000	0.000000
Std. Dev.	0.020799	0.220318	0.801457	1.783036	0.105100
Skewness	5.098322	2.614917	-0.663900	4.110348	3.846259
Kurtosis	35.27256	8.594211	3.117785	18.26984	18.77287
Jarque-Bera	8734.357	447.1785	13.54904	2293.202	2348.181
Probability	0.000000	0.000000	0.001143	0.000000	0.000000
Sum	5.716156	33.37865	1349.092	162.8849	9.149976
Sum Sq. Dev.	0.078736	8.834255	116.9047	578.6175	2.010392
Observations	183	183	183	183	183

APPENDIX II

Result of the Multiple Regression for Islamic Banks in Malaysia

Dependent Variable: ROA				
Method: Panel EGLS (Cross-section weights)				
Date: 04/07/18 Time: 01:56				
Sample: 2008 2016				
Periods included: 9				
Cross-sections included: 16				
Total panel (balanced) observations: 144				
Linear estimation after one-step weighting matrix				
White cross-section standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.019302	0.026135	0.738537	0.4616
CAR	0.057759	0.018436	3.132978	0.0022
DEPOSIT	-0.077523	0.026311	-2.946394	0.0038
LIQUIDITY	0.001323	0.002077	0.636968	0.5253
SIZE	-0.000444	0.003858	-0.115038	0.9086
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.606240	Mean dependent var	0.036515	
Adjusted R-squared	0.545906	S.D. dependent var	0.022153	
S.E. of regression	0.007422	Sum squared resid	0.006830	
F-statistic	10.04804	Durbin-Watson stat	1.539090	
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.378580	Mean dependent var	0.021294	
Sum squared resid	0.008182	Durbin-Watson stat	1.588352	

APPENDIX III

Result of the Multiple Regression for Conventional Banks in Malaysia

Dependent Variable: ROA				
Method: Panel EGLS (Cross-section weights)				
Date: 04/05/18 Time: 11:53				
Sample: 2008 2016				
Periods included: 9				
Cross-sections included: 22				
Total panel (unbalanced) observations: 183				
Linear estimation after one-step weighting matrix				
White cross-section standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.120308	0.011524	10.43999	0.0000
CAR	-0.007034	0.007548	-0.931823	0.3529
DEPOSIT	-0.015696	0.006411	-2.448245	0.0155
LIQUIDITY	0.010427	0.003617	2.882437	0.0045
SIZE	-0.013061	0.001728	-7.558320	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.882523	Mean dependent var	0.129523	
Adjusted R-squared	0.863817	S.D. dependent var	0.087623	
S.E. of regression	0.013588	Sum squared resid	0.028988	
F-statistic	47.17731	Durbin-Watson stat	1.393300	
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.496210	Mean dependent var	0.031236	
Sum squared resid	0.039667	Durbin-Watson stat	3.533612	