DETERMINANTS OF BANK PERFORMANCE IN MALAYSIA: CONVENTIONAL VS ISLAMIC AND DOMESTIC VS FOREIGN ISLAMIC BANKS (2006-2010)

BY

AIZAT BIN ALIAS @ ABDUL AZIZ

A research paper submitted in fulfillment of the requirements for the degree of Master of Science in Islamic Banking and Finance

Institute of Islamic Banking and Finance
International Islamic University
Malaysia

AUGUST 2012

ABSTRACT

This paper aims to compare and investigate the performance of Islamic banks against conventional banks, and foreign Islamic banks against domestic Islamic banks in Malaysia for the period 2006 to 2010. The study uses 33 banks in Malaysia comprise of 18 commercial banks, 15 Islamic banks, 10 domestic Islamic banks, and 5 foreign Islamic banks. Financial ratios of return on assets (ROA) and return on equity (ROE) are used as dependent variables and independent variables comprise of loan loss provisions to total assets, net loans to total assets, total overheads to total assets, shareholders equity ratio, bank size (total assets), gross domestic products and inflation rate. Descriptive, correlation, multiple regression and test of significance for equality of means analyses were employed to test the hypotheses. In general, the study found that the independent variables respond inconsistently on dependent variables based on type of the banks. Furthermore, the study found that the conventional banks perform better than Islamic banks in term of profitability, size and assets quality. Same goes to domestic Islamic banks where they perform better than foreign Islamic banks in term of profitability, size and asset quality.

ملخص البحث

الأجنبيـــة أو المحليـــة سواء والتقليديــــة الإســـلامية البنــوك أداء وتبحـــث تقـــارن لأن تســـعي راسـةالـد هـذه ، ماليزيا في بنكا 33 على الدراسة هذه اشتملت . 2010 و 2006 مايين السفترة خلال من ماليزيا في يشار .أجنبيسة والأخرى ،محليسة بنوك عشرة منها :إسلاميا بنكا 15 و ،تجاريسا بنكا 18 تتضمن والستى ونسبة ،الماليسة الأصول من العائد نسبة :وهما مستقلين ماليين متغيريسن استخدم الباحسث أن إلى غير) تابعه متعزات الورقسة هذه في استخدم فقد ذلك إلى بالإضافة الملكية الحقوق من العائد إجمالي إلى القروض وصافي ،الأصول إجمالي إلى القرض فقدان مخصص من تتألف والستى ،(مستقلة وناتج ،البنك وحجم ،المسساهين ملكية ونسبة ،الأصول إجمالي إلى الإجمالية العامة والنفقسات ،الأصول م كلا الباحسة أعمل فقسد البحث فرضسية اختبار أجل ومن التضيخم معدل وأخيرا االإجمالي المحلسي ذلك على وبناء .التحليك وسائل لمساواة الأهمية واحتبار ،المضاعف والإنحدار ،والإرتباط ،الوصف المتــــغيرات عن مختلــف المســـتقلة المتــــغيرات أن وهـى :التاليـــة النتـــائج إلى الباحــث توصــل فقــد مقارنة أفضل التقليدية البنوك أداء أن الباحث وحد فقد أيضا .البنسوك نوع أساس على التابعية أداء أظهرت المحليسة فــــالبنوك وبالمشـــل .الأصــول وجـودة ،والحجــم ،الأربــاح حانب في الإســــلامية بـــــالبنوك أفقمسن می سنـــوث في لإسسالامية تفسس . خو ــــب

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 research paper for the degree of Master of Science in Islamic Banking and Finance.

Muhammad Abduh

Supervisor

This research paper was submitted to the IIUM Institute of Islamic Banking and Finance and is accepted as a fulfillment of the requirements for the degree of Master of Science in Islamic Banking and Finance.

Ahamed Kameel Mydin Meera

Dean.

IIUM Institute of Islamic Banking and Finance

DECLARATION

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

Aizat bin Alias @ Abdul Aziz

Signature.

Date 27 August, 2212

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESEARCH

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

DETERMINANTS OF BANK PERFORMANCE IN MALAYSIA: CONVENTIONAL VS ISLAMIC AND **DOMESTIC VS FOREIGN ISLAMIC BANKS (2006-2010)**

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

Affirmed by Aizat bin Alias @ Abdul Aziz

Signature

August 201)

I dedicate this research work to my parents, who always supported endeavor. They are the reason I'm here at all, and made me who I am to	d me in every day.

ACKNOWLEDGMENT

In the name of Allah the Most Gracious and the Most Merciful

Alhamdulillah, all praises be to Allah for the strengths and His blessing in completing this research work. Also praise is only be to Allah the Almighty for his bounty and blessing showers upon us and peace upon our prophet Muhammad (S.A.W) his family, his companions, and those who follow his teaching until the end of the day.

My special and sincere appreciation goes to my supervisor, Dr. Muhammad Abduh, for his supervision, continuous support and encouragement. His invaluable help of constructive comments and suggestions throughout the preparation of this thesis have contributed to the success of this research.

My deepest gratitude goes to my beloved parents, and also to my brothers and sisters, for their endless love, prayers and encouragement.

Last but not least, my sincere thanks to all my lecturers in IIUM iBF especially Prof Dr Fadzlan Sufian, Prof Dr Abdul Rahim Abdul Rahman, Prof Dr Ahamed Kameel Mydin Meera, Dr Sheila Nu Nu Htay, Dr Umar Idris, Dr Hikmatullah Babu Sahib, Assoc. Prof. Dr. Younes Soualhi, Tuan Hj. Mustapha Hamat, Tuan Hj. Md. Ali Md. Sarif, Assoc. Prof. Dr. Engku Rabiah Adawiah Engku Ali, Assoc. Prof. Dr. Dzuljastri Abdul Razak, Prof. Dr. Mohd. Aslam Haneef, Dr. Mustafa Omar Mohammed, Dr. Azman Md. Nor, Azman Ismail, Dr Siti Salwani and others for their kindness, guidelines, motivation and moral support during my study. Thanks for the friendship and memories. To those who indirectly contributed to the completion of this research work, your kindness means a lot to me. Thank you very much.

TABLE OF CONTENTS

Abstract	11
Abstract in Arabic	iii
Approval page	iv
Declaration	
Copyright Page	vii_
Acknowledgements	
List of Tables	xi
List of Abbreviations	xii
CHAPTER 1: INTRODUCTION	1
1.0 Background of the Study	1
1.1 Problem Statement	3
1.2 Research Objectives	
1.3 Significances of the Study	
1.4 Organization of the Study	
CHAPTER 2: LITERATURE REVIEW	
2.0 Introduction	
2.1 Bank's Performance	
2.2 Bank's Performance in Malaysia	12
2.3 Islamic Bank's Performance	13
2.4 Foreign and Domestic Banks' Performance	17
CHAPTER 3 RESERCH.METHODOLOGY	10
3.0 Data	
3.1 Sample	
3.2 Variables Used in the Study	21
3.2.1 Dependent Variables	
3.2.2 Independent Variables	
3.2.2.1 Internal Determinants	
3.2.2.2 External Determinants	24
3.3 Research Model	25
3.3.1 Multiple Regression Analysis	26
3.3.2 Classical Assumption in Regression Analysis	
3.3.2.1 No Multicollinearity	28
3.3.2.2 Non Autocorrelation	29
3.3.2.3 The Disturbances are Normally Distributed	29
3.3.3 Statistical Analysis for Regression Models	30

CHAPTER 4: FINDINGS AND ANALYSES	31
4.1 Introduction	31
4.2 Descriptive Analysis	31
4.2.1 Descriptive Analysis for Conventional and Islamic Banks	32
4.2.2Descriptive Analysis for Foreign and Domestic Islamic Banl	ks 33
4.3 Correlation Analysis	35
4.4 Regression Analysis	39
4.4.1 Regression Analysis for Conventional and Islamic banks	39
4.4.2 Regression Analysis for Foreign and Domestic Islamic Ban	ks <u>4</u> 3
4.5 Hypothesis Testing	46
4.6 Comparing Bank's Performance	48
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	53
5.0 Introduction	53
5.1 Findings Summary	53
5.2 Recommendations	55
BILBIOGRAPHY	57

LIST OF TABLES

Table No.		<u>Page</u> <u>No</u>
3.1	Sample of Bank's Data	19
4.1	Descriptive Analysis for Conventional and Islamic banks	32
4.2	Descriptive Analysis for Foreign and Domestic Islamic banks	34
4.3	Correlation Analysis for Conventional and Islamic Banks	36
4.4	Correlation Analysis for Foreign and Domestic Islamic Banks	38
4.5	Model Summary for Conventional Banks	40
4.6	Regression Analysis for Conventional banks	40
4.7	Model Summary for Islamic Banks	41
4.8	Regression Analysis for Islamic Banks	42
4.9	Model Summary for Foreign Islamic Banks	43
4.10	Regression Analysis for Foreign Islamic Banks	44
4.11	Model Summary for Domestic Islamic Banks	45
4.12	Regression Analysis for Domestic Islamic Banks	45
4.13	Test of Significance for Equality of Means for Conventional versus Islamic banks	4 9
4.14	Test of Significance for Equality of Means for Foreign versus Domestic Islamic banks	50

LIST OF ABBREVIATIONS

BIMB Bank Islam Malaysia Berhad

BNM Bank Negara Malaysia

BS Bank size

KFH Kuwait Finance House

etc Etcetera

GCC Gulf Cooperation Council

GDP Gross domestic product

HHI Herfindahl-Hirschman Index

i.e. That is

IB Islamic Banking

IBFIM Islamic Banking and Finance Institute Malaysia

IIUM International Islamic University of Malaysia

INCEIF International Centre For Education In Islamic Finance

INF Inflation

ISRA International Shari'ah Research Academy for Islamic Finance

LLPTA Loan loss provisions to total assets

LUTH Lembaga Urusan Tabung Haji

MIFC Malaysia International Islamic Finance Centre

NLTA Net loans to total assets

NLTA Net loans to total assets

ROA Return on assets

ROE Return on equity

SER Shareholder equity ratio

TA Total assets

TOTA Total overheads to total assets

UK United Kingdom

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND OF STUDY

The establishment of Islamic bank in Malaysia is to cater the needs of Muslim to solve their saving and financing issues. Lembaga Urusan Tabung Haji (LUTH), which was established in 1969, marked the first development of Islamic financial institution in Malaysia. The idea was proposed by Ungku Abdul Aziz in order to help boost the Malay rural economy and to enable the Muslims to perform Hajj. Then in mid 1983, Bank Islam Malaysia Berhad (BIMB) was established as the first Islamic bank in Malaysia. The existence of BIMB gives alternative for Muslims to opt for halal way of financing. Later, all conventional banks are allowed to offer Islamic banking products and services under Islamic banking scheme introduced in 1993 by Bank Negara Malaysia (Central Bank of Malaysia). The introduction of Islamic banking scheme has encouraged more participants in Islamic banking system. The first foreign bank to start operating Islamic banking is Kuwait Finance House (KFH) in 2004. Today, all local banks and most foreign banks have their own Islamic banking subsidiary where the total number of Islamic banks in Malaysia has reached to 16.

Islamic banks have increased their popularity among the consumers. Information from Bank Negara Malaysia indicates that total financing from Islamic banks is increasing significantly every year. In 2006, total financing to the market from Islamic banks was amounted to RM 78.5 billion while total deposit in Islamic banks was RM 99 billion. Both figures soared more than 100% in 2010. In 2010, the total financing amount was RM 162 billion and total deposit amount was RM 217

billion. Islamic banks held 12% market share for deposit in 2006. The market share increased to 19% in 2010. For the financing market share, Islamic banks held 13% of overall share in 2006 and then in 2010, the percentage has increased to 18.4%. There was no difference in terms of the number of the deposit and financing because of asset and liability management. Total banks' assets in 2004 were worth RM 761.2 billion. The figure increased to RM 1.48 trillion in 2010. Domestic banks held substantial number of market share which amounted to 75.7% (RM576.5 billion in 2004. The market share for domestic banks slightly increased in 2010 where they held 77.5% (RM 1.15 trillion) of the share. Furthermore, Islamic banks had RM131 billion assets in total in 2006. The figure increased more than 150% in 2010 where the total assets were RM 334.9 billion. Market share for Islamic banks in total assets stood at 12.8% in 2006 and increased to 22.5% in 2010. From the figures, it shows that Islamic banks have become more popular than they were before among consumers. People are now more accepting towards Islamic banks due to the ever increasing religious awareness as well as responsibilities as they need to avoid riba and attain more understanding on Islamic banking's concept.

Malaysian government has been working hard to promote and improve the Islamic banking system as they aspire to be a hub for Islamic finance. Government and regulators have done lots of initiatives in promoting and educating the people about Islamic banking for instance, tax redemption on Islamic banking products, providing knowledge to people i.e. establishment of INCEIF, IIUM Institute of Islamic Banking and Finance, MIFC, IBFIM, etc. Therefore, it is believed that the government, regulators, managers, practitioners, and academicians should take note of this study in order for them to enhance the understanding and knowledge on Islamic banking as it will help them to identify what makes Islamic banking profitable.

1.1 PROBLEM STATEMENT

Banks is an intermediary for business. Most of the people will go to the banks if they want to buy a house, a car, look for business financing, acquire machinery, etc. All of these smoothen the cycle of business. Without the existence of banking system, it would be difficult for surplus party to shift their surplus to the correct deficit party. The relationship between banks and firms are also very influential. Nowadays, in Malaysia, all local conventional banks have their own subsidiary Islamic banks. The trend is not just for domestic conventional banks only, in fact. most of foreign conventional banks have their own subsidiary Islamic banks and some of conventional banks offer Islamic banking products.

Companies need banking system to smoothen their business. The need of banking system is not just to acquire financing only, but also to ease their operations i.e. currency exchange, storage of money, letter guarantee, transfer payment, etc. Therefore, it is important to have stability in the banking system. Subprime mortgage crisis 2007-2008 is one of the good examples for us to learn that instability banking system could affect the whole country and even the rest of the world. It was all started with the collapse of one bank (Lehmann Brother) that resulted paralyzing the whole United States. Banks work interrelated with each other and with other institutions i.e. lender and borrower relationship. Subprime crisis is mentioned as the worst crisis since The Great Depression. The crisis has destroyed trillion of dollars of wealth. Millions of people lost their jobs and trillion of dollars from taxpayer money have been used for the purpose of overcoming the crisis. Hence, De Bont (2010) stated that

¹ Mark Landler, "I.M.F. Puts Bank Losses From Global Financial Crisis at \$4.1 Trillion," The New York Times. 21 April, 2009. http://www.nytimes.com/2009/04/22/business/global/22fund.html

there is a need to reform the moral dimension of capitalism by having an effective action and as well as symbolism.

Banks need to fully utilize depositors' money to generate higher income. The income will be declared as profit for the bank. By using Mudarabah contract, the profit will be shared between depositors and bank in pre-agreed ratio. If banks are unable to generate desirable returns, it will result on low return to shareholders and depositors. Banks need to get deposits from customers in order to make their business sustains. Therefore, banks are obliged to give higher return to the depositors. If high returns are guaranteed, then only are the depositors willing to keep their funds in the bank. However, if the returns are sufficiently low they will withdraw their money in anticipation of low returns (Allen & Carletti, 2008). In conventional banks, return from fixed deposit is fixed, regardless of the banks manage to get profit or incur loss. It will affect the shareholders' return. However, Islamic banks provides an alternative to this by introducing, Mudarabah account which is similar to fixed deposit except it does not pay fixed return. Depositors only receive the portion of profit based of preagreed profit sharing ratio that Islamic banks managed to generate from depositors' fund. On that note, some Islamic banks products do offer fixed return i.e. Murabahah deposit. In this type of deposit, Islamic banks are obliged to pay fixed return to the customer because they are using Murabahah concept. Thus, both conventional banks and Islamic banks need to increase their profits in order to attract or to hold on to their depositors and shareholders to park their money in them.

Different types of banks such as conventional and Islamic banks, foreign and domestic banks have different strategies in their business. Therefore, it is very important to study the performance of the banks based on their types. This will be useful for a manager to increase the profitability of the banks and to sustain their

business. Hence, banks can avoid from being uncompetitive and left far behind from their competitors if they know the factors that can help them to grow. In addition, understanding the performance of the banks could also help regulators to develop a better regulatory framework that can protect the interest of the economy.

1.2 RESEARCH OBJECTIVE

The main objective of this research is to study the performance of Islamic banks in Malaysia for the period of 2006 to 2010. The research objective can be broken into two (2) parts:

- To investigate the performance of Islamic banks vis-à-vis conventional banks in Malaysia for the period of 2006 to 2010.
- To investigate the performance of foreign Islamic banks vis-à-vis domestic
 Islamic banks in Malaysia for the period of 2006 to 2010.

1.3 SIGNIFICANCE OF STUDY

This study may help many parties i.e. knowledge, regulators and practitioners to identify the motivational factors that can influence banks' performance. Performance of a bank can become a market signal for the economic condition. For instance, if bank's growth is slow and less financing or loan given to the market, it shows that the product market is not in active situations and vice versa. Therefore, it is very important for all parties to be alert with the banks' performance.

Government and regulators can benefit from this study by improving or sustaining the market condition. In Malaysia, government is responsible for fiscal policy and regulator (central bank of Malaysia) is responsible for monetary policy. Since Malaysia wants to become the main player in Islamic banking industry. therefore, they can strategize their upcoming actions for improving the performance of Islamic banks. Furthermore, it also can be used for monitoring and tightening the regulations if necessary in order to avoid any potential crisis.

For managers, this study can be a tool for them to strategize their business. Due to stiff competition between conventional and Islamic banks, as well as foreign and domestic banks, managers must understand the factors that contribute to their banks' performance in order to come out with business strategies. Further analysis of financial ratios could also provide a signal and be able to predict future progress of their banks' situation which are enhancing the financial institution efficiency and stability of the Malaysian financial structure.

Depositors will look at the performance of the banks – especially the history of performance. Things that matter the most to the depositors are the expected return that they will receive. Since Islamic banks do not offer ex-ante return, therefore, it is very important for depositors to look at the respective banks' past performance in order to predict the future return that they might receive.

1.4 ORGANIZATION OF THE STUDY

There are five chapters altogether including this introduction part. The next chapter will be on the discussion of the literature review. In this chapter, we will review previous study on commercial banks' performance, Islamic banks' performance and foreign against domestic performance. Chapter three will explain on research design that will be used in this study including sample, statistical method and types of data. Chapter four will discuss on the findings and analysis of this research.

Descriptive, correlation and regression analyses will be discussed inside the said chapter. Furthermore, we will compare the ratios between conventional and Islamic banks and, domestic and foreign Islamic banks. Chapter five will be the conclusion part where suggestions and recommendations of the researcher will be presented.

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

Demand for Islamic banking is increasing and it is not just in Muslim countries but also in non-Muslim countries. Islamic banking has wider market compared to conventional banks because both Muslim and non-Muslim can use Islamic banking products.

In this chapter, we review previous studies related to our thesis. The chapter begins with the review of commercial banks' performance, commercial banks' performance in Malaysia, Islamic banks' performance and foreign and domestic banks' performance.

2.1 BANK'S PERFORMANCE

When measuring banks' performance, most of researchers use profitability ratios i.e. return on assets (ROA) and return on equity (ROE) in determining the performance. ROA is a measurement on how the banks utilize their assets for generating profit. Formula for ROA is net income divided with total assets. On the other hand, ROE is a measurement on how effective the banks generate their profit with the amount that shareholders have invested. Formula for ROE is net income divided with shareholder's equity.

Kunt and Huizinga (1998) utilize bank level data for 80 countries from different regions in the 1988-1995. This paper shows that differences in interest margins and bank profitability reflect a variety of determinants i.e. size, leverage, type

of business, foreign ownership, macro indicators, taxation and regulatory variables, financial structure variables, and legal and institutional indices. The authors use regression analysis to examine the underlying determinants of interest spreads and bank profitability. For the result, this paper finds that foreign ownership is associated with higher interest margins and bank profitability, especially in developing countries. Furthermore, developing countries are more affected on interest margin and profitability than developed countries with institutional factors (i.e. credit rights, law, corruption, etc). The larger bank asset to GDP ratio and a lower market concentration ratio lead to lower margins and profits. Also, there is evidence that the corporate tax burden is fully passed on to bank customers.

Kosmidou, Tanna and Pasiouras (2005 investigate the impact of bank-specific characteristics, macroeconomic conditions and financial market structure on UK owned commercial banks' profits, measured by ROA. Five measures used as internal determinants of performance (cost to income ratio, ratio of liquid assets to customer and short term funding, ratio of loan loss reserves to gross loans, ratio of equity to total assets, and total assets of a bank). As for external measures, GDP growth and inflation as representatives for macroeconomic conditions, and measurements for financial market structure are concentration in the banking industry, and stock market capitalization. The authors use fixed-effects regression, Breusch-Pagan, and White's transformation as their tools. The results show that well capitalized banks face lower costs of external financing, which reduces their costs and enhances profits. The other significant determinants are cost-to-income ratio and bank size, both of which impact negatively on bank profits. The impact of liquidity on bank performance is not clearcut, and varies with the measure of profitability used. Specifically, liquidity is positively related to ROA. The impact of loan loss reserves is also not clear-cut, being

negative and insignificant on ROA. The addition of external factors has a relatively small impact on the overall explanatory power of the regression, but individually they appear to have significantly influenced bank profitability. Specifically, the authors find that the macroeconomic environment (proxy by GDP growth and inflation) has a positive impact on bank performance, as do concentration in the banking industry and stock market development.

Halil, Mehmet and Buket (2011) examine the factors that can affect bank's performance by using panel data analysis. Equity profitability has been chosen as dependent variable. Independent variables are market share and number of branches. According to the regression results, market share and number of branches has positive and significant effect on profitability. The research shows that relatively low for number of branches and bank profitability. This is due that when banks increase their branches it will take new cost, thus, it will reduce the profitability.

Dietrich and Wanzenried (2009) analyze the profitability of commercial banks in Switzerland over the time period from 1999 to 2006. Using 453 banks as a sample, the authors use ROA and ROE as dependent variables and also look at macroeconomic and industry-specific variables into the regression analyses. Result shows that there exist significant differences in profitability between commercial banks in Switzerland with several of reasons. Among the findings are well capitalized and high growth in loan volume gives positive indicator with profitability. The most important factors are the GDP growth variable, which affects the bank profitability positively, and the effective tax rate and the market concentration rate, which both have a significantly negative impact on bank profitability. Furthermore, the study shows that domestic banks in Switzerland are more profitability than foreign banks.

Abdelkader (2011) examines the profitability indicators of commercial banks of Tunisian in 2003-2010. The net interest margin is used as profitability measure to determine the effect of bank-specific, macroeconomic indicators, financial development indicators and bank concentration and crisis on profitability. The descriptive, correlation and regression analysis results are derived with the help of Stata. The author used the generalized least squares to estimate the panel model who measure the bank profitability. Therefore, if profitability is determined by using net interest margin, it seems to have been positively influenced by the size, composition of assets, credit risk, concentration, market capitalization and the crisis.

Husni (2011) examines the performance of Jordanian commercial banks in the period from 2000 till 2010. The author uses Pooled Ordinary Least Squares (OLS) method for controlling the effect of the internal and external factors on Jordanian commercial banks performance and tested on time series cross-sectional bank level data. The study sample consists of 14 banks. Dependent variables are ROA and ROE, while independent variables are bank size, total debt to total assets, shareholders equity ratio, net interest margin, annual growth rate for GDP, annual inflation rate, and exchange rate stability. The analysis shows that there are significant and positive relationship between ROA and the bank size, total debt and total assets, shareholders equity, net interest margin and exchange rate. However, there are significant and negative relationship between ROA and annual growth rate for GDP and inflation rate.

Fadzlan and Muzafar (2010) examine the determinants of Indonesia banks profitability for the period of 1990 until 2005. By using ROA as dependent variable and independent variable are internal (i.e. liquidity, capital adequacy, and expenses management) and the external determinants (i.e. ownership, firm size, and economic

conditions), the authors use linear regression model for testing the relationship. They also use least square method, White transformation and Hausman test. The paper finds that income diversification and capitalization are positively related to bank profitability, while size and overhead costs have negative impacts. Furthermore, the impact of economic growth and banking sector is positive.

2.2 BANKS' PERFORMANCE IN MALAYSIA

Malaysia is a developing country. Hence, research on bank's performance between developed and developing countries will bring different result. Since this study focuses on performance of Islamic banks in Malaysia, therefore, it is very importance to highlight previous study on Malaysian banks' performance.

Rasidah and Mohd (2011) investigate contributions of the profitability determinants to the performance of Malaysia and China commercial banks. The data set consists of four state-owned commercial banks in People's Republic of and nine local commercial banks in Malaysia. Return on Average Assets and return on average equity are used to measure profitability. Five variables have been identified as internal determinants i.e. ratio of net loans to deposit and short-term funding, ratio of loan loss provisions to net interest revenue, ratio of equity to total assets, ratio of non-interest expense to average assets, operating expenses and size; and three external determinants i.e. GDP, inflation and real interest rate. The empirical analysis is based on panel data fixed effect model that incorporates balanced annual data series of Malaysia and China. As for the result, ROE, the credit risk is negatively related to Malaysian banks profitability. The effect of capital on banks performance is rather mixed. Capital strength and the ROE of China's banks profitability are positively and