



DETERMINANTS OF ISLAMIC BANK PROFITABILITY IN MALAYSIA

Intan Maizura Abdul Rashid

School of Business Innovation and Technopreneurship,
Universiti Malaysia Perlis, Malaysia
intanmaizura@unimap.edu.my

1.1 INTRODUCTION

The elementary concepts of modern Islamic banking date back to the mid 1940s. Models for Islamic banking appeared in the mid-1950s, but comprehensive and detailed concepts for interest-free banking only appeared in the late 1960s. The political environment during that time almost all Muslim countries were hardly favorable for a change in the entire system of banking and finance. In fact, the first experiment in Islamic banking was set up undercover in Mit Ghamr, Egypt in 1963. The model for the experiment was the German Savings bank modified to comply with Islamic principles; it was barred from charging and paying interest. Nevertheless, the charter of the Bank did not refer to Shariah. Beginning in 1974, several Islamic banks have been established which include Dubai Islamic Bank in 1975, Faisal Islamic Bank of Sudan in 1977, Faisal Islamic Egyptian Bank and Islamic Bank of Jordan in 1978, Islamic Bank of Bahrain in 1979, the International Islamic Bank of Investment and Development, Luxembourg in 1980 and BIMB in 1983. Today, there are more than a hundred financial institutions which claim to be operating partially or fully on an interest-free basis in 34 countries. Islamic banks are now playing an increasingly significant role in their respective markets. To this end, Islamic banks are rapidly gaining market shares in their domestic economies and their presence in highly sophisticated markets exemplifies the empirical success of the viability of eliminating fixed interest payments from financial transactions. Indeed, consolidation among banks, rising competition and continuous innovation to provide financial services, all contribute to a growing interest in a detailed critical evaluation of Islamic

banks. Base on BNM latest statistic, there have seventeen Islamic Bank Institutions and six full fledge Foreign Islamic Bank that licensed by Bank Negara Malaysia which are Al-Rajhi Banking & Investment Corporation, Kuwait Finance House Berhad, Asian Finance Bank Berhad, HSBC Amanah (M) Berhad, OCBC Al-Amin Berhad and Standard Chartered Saadiq Berhad.

1.2 BACKGROUND OF STUDY

There have many researchers studied on Determinant of Islamic Bank Profitability. The determinant include internal and external factor. Internal determinants of profitability, which are within the control of bank management, can be broadly classified into two categories financial statement variables and non-financial statement variables. While financial statement variables relate to the decisions which directly involve items in the balance sheet and income statement contrast to non-financial statement variables involve factors that have no direct relation to the financial statements. The examples of non-financial variables within this category are number of branches, status of the branch, location and size of the bank. Meanwhile, External variables are those factors that are considered to be beyond the control of the management of a bank. Examples of external variables are competition, regulation, concentration, market share, and ownership, scarcity of capital, money supply, inflation and size. Hassan and Bashir (2003) studied the effect of controlled and uncontrolled variables on Islamic Bank profit. They study on factors such as capital, overhead, gross domestic product and conventional interest rates were positively related to profitability



meanwhile loan ratios, reserves taxes, and size was adversely related. Professor Sudin Haron (2003) studied the impact of profitability determinants on performance of Islamic banks. He measure the bank profitability base on five ratio which are Total income as a percentage of total assets (TITA), Bank's portion of income as a percentage of total assets (BITA), Net profit before tax as a percentage of total asset (BTTA), Net profit before tax as a percentage of capital and reserves (BTCR) and Net profit after tax as a percentage of capital and reserves (ATCR). Bourke (1989) was the first researcher to include internal variables in a profitability study involving cross-country data. The internal variables used were capital ratios, liquidity ratios and staff expenses, whilst the dependent variables were comprised of the net profit before taxes against total capital ratio and net profit before taxes against total assets ratio. Bourke reported that all internal variables were positively related to profitability. Now the researcher focuses the study into International Islamic Bank that operates in Malaysia currently.

1.3 BACKGROUND OF BANK

Today, Al-Rajhi Bank network covers over 550 bank branches, 2,600 ATM machines and 16,700 POS installed all over the Kingdom of Saudi Arabia. Backed by the fully forces of their head operations in the Middle East, Al Rajhi Bank made its maiden foray into the international banking market by setting up its first overseas operations in Malaysia in October 2007. Starting with its first and main branch at Jalan Ampang on 16 October 2009, Al Rajhi now has 20 branches under in its wings, 15 in the Klang Valley, one each in Johor Bahru, Melaka, Penang, Kuching and Kota Bharu. They are currently expanding our suite of products and services to meet their growing customer pool. Al-Rajhi also one of the full-fledged Islamic bank that provide wholesale, retail and commercial banking and investment services.

1.4 PROBLEM STATEMENT

To improve the Islamic banks performance by identifying the indicator by using return on asset (ROA) as a measurement to profitability. International Islamic Bank in Malaysia has a high potential in Malaysia even the existing of the foreign Islamic Bank is still new in Malaysia. (BNM report). Based on sources by Bank Negara, Foreign Islamic Bank exist in Malaysia in year 2007. Kuwait Finance House is the first International Islamic Bank that established by Bank Negara. It followed by other foreign Islamic bank such as Al-Rajhi Bank, Asian Finance House and PT. Bank Syariah Muamalat Indonesia, Tbk. By using the data of net income Kuwait Finance House, Al-Rajhi Bank and Asian Finance Bank, we can see that the International Islamic Bank having good performance is Islamic Banking industry in Malaysia. Thus, the researcher want to define what is the indicator to their performance by using return on asset (ROA) as a measurement to profitability.

1.5 OBJECTIVES

- 1.5.1 To determine the relationship between internal factors those are Overhead Cost and Weighted-Risk Capital Ratio to Islamic banking profitability.
- 1.5.2 To analyze relationship between external factors those are Inflation and Gross Domestic Product to Islamic banking profitability.
- 1.5.3 To examine the most significant factor that contributes to Islamic banking profitability.

1.6 RESEARCH QUESTIONS

- 1.6.1 What is the relationship between internal factor which are Overhead Cost and Weighted-Risk Capital Ratio to Islamic banking profitability?
- 1.6.2 What is the relationship between external factor which are Inflation and Gross Domestic Product to Islamic banking profitability?



1.6.3 What is the most significant factor that contributes to Islamic banking profitability?

Negara Malaysia (BNM) may not capture the whole population characteristics which means that our finding cannot be generalized and used for other sectors.

1.7 SCOPE OF STUDY

Research that has been conducted is research about International Islamic Banking that operates in Malaysia that consists of Al Rajhi Bank, Kuwait Finance House and Asian Finance Bank. Base on their own profit in their income statement that reported to Bank Negara, the researcher narrows the study to the bank that gains higher profit in 2010 which is Al Rajhi Bank.

The data that have been analyzed is year 2008, 2009 and 2010. The researcher study on determinants that affect the profit of International Islamic Bank that operates in Malaysia. The determinant include internal an external factor. However, for internal determinant researcher only studied for the financial statement variables which are overhead cost and risk-weighted capital ratio. Meanwhile, for external researcher study on how inflation and gross domestic product affect International Islamic bank profit.

1.8 LIMITATION OF STUDY

1.8.1 Availability of the data

The information or data that are related to the study are limited since researcher only used data for the past 3 years because of Al-Rajhi Bank run their business in Malaysia at year 2007.

1.8.2 Accuracy and Reliability of data

The accuracy of our data is dependent entirely on the accuracy of the secondary data that get from the sources that are available to researcher.

1.8.3 Generalization of finding

The focus on higher profit in year 2010 as a sample for the whole International Islamic banking sector listed by Bank

1.8.4 Time constraint

Time given to complete the research is short to gain more accurate finding. Besides that researcher is not familiar with the software that suggested by lecturer to process the data. Thus, it takes time for researcher to process and manipulate the data.

1.9 SIGNIFICANT OF STUDY

1.9.1 International Islamic Banking

The significance of this study is to determine whether the findings can be used by the International Islamic banking industry. Find the best factors to maximize their profits to enhance the value of their bank.

1.9.2 Other Researchers

Based on this research discussion and findings, other researchers can use this study as references for future research.

2.1 LITERITURE REVIEW

The term "Islamic banking" refers to a system of banking or banking activity that is consistent with Islamic law (Shariah) principles and guided by Islamic economics. In particular, Islamic law prohibits usury, the collection and payment of interest, also commonly called *riba* in Islamic discourse. In addition, Islamic law prohibits investing in businesses that are considered unlawful, or *haram* (such as businesses that sell alcohol or pork, or businesses that produce media such as gossip columns or pornography, which are contrary to Islamic values). Now day there have numbers of International Islamic banking in Malaysia. The first international Islamic banking in Malaysia that was



granted license by Bank Negara is Kuwait Finance House (M) Berhad, followed by Al Rajhi Bank and Asian Finance Bank. However there have several determinants that affect their profitability.

Depositors may also be interested in characterizing the performance of bank since they are not entitled to fixed returns and the nominal values of their deposits are not guaranteed. Depositor also one of the investor that will be contribute to bank profit since that is the major activities of bank. The different between conventional and Islamic is Islamic will invest the money that invested by investor to the activities that followed shariah and under shariah compliance. The profit from the investment activities will shared by both parties based on pre agree ratio. Basically there have many factors that affect the profitability of Islamic bank which is internal and external factor. Previous study (**Professor Sudin Haron, 2004**) finds that internal factors such as liquidity, total expenditures, funds invested in Islamic securities, and the percentage of the profit-sharing ratio between the bank and the borrower of funds are highly correlated with the level of total income received by the Islamic banks. Similar effects are found for external factors such as interest rates, market share and size of the bank.

Other determinants such as funds deposited into current accounts, total capital and reserves, the percentage of profit-sharing between bank and depositors, and money supply also play a major role in influencing the profitability of Islamic banks. Previous studies have also revealed a positive relationship between inflation and bank profitability (Bourke, 1989). For conventional banks, high inflation rates generally lead to higher loan rates, and hence higher revenues. However, in the case of Islamic banks, inflation may impact performance positively if a larger portion of Islamic banks' profits accrues from direct investment, shareholding and other trading activities (*murabahah*). Yet, inflation may have a negative effect on bank profitability if wages and other costs (overhead) are growing faster than the rate of inflation. So this paper intends to characterize some internal and external indicators that impact the overall performance of Islamic banks. Specifically, the purpose of the study is to closely examine the relationship between profitability and the banking characteristics. To this end, a

comprehensive set of internal characteristics is examined as determinants of banks' net margins and profitability. These internal characteristics include bank capital and overhead cost of the bank. While studying the relationship between banks' internal characteristics and performance, this paper also examine the relationship between external factor which is inflation rate and gross domestic product (GDP) to bank profitability. The intention is to decide which, among the potential determinants of performance, appears to be important.

2.2 INTERNATIONAL ISLAMIC BANK

International Islamic Bank defined as Islamic Bank from other country that expands their business in Malaysia that has been licensed by Bank Negara Malaysia.

2.3 PROFITABILITY

Profit and loss can be shown in the income statement. A financial statement that summarizes the revenues, costs and expenses incurred during a specific period of time, usually fiscal quarter or year. These records provide information that shows the ability of a company to generate profit by increasing revenue and reducing costs.

2.3.1 Gross profit

Gross profit calculated by removing only the part of expenses that can be traced directly to the operating and by adding income from operating. In banking industry, their most activities are investment from depositors and financing. Gross profit still includes general (overhead) expenses like R&D, S&M, G&A, also interest expense, taxes and extraordinary items.

2.3.2 Total net income/loss

Total net income/loss calculated from gross profit deducted the total income that attribute to the depositors.



2.3.3 Profit/loss before taxation and Zakat

The profit that minus the personnel cost and other overhead and expenditure cost.

2.3.4 Net income/loss for financial year

Deduct all the taxation and Zakat expenses from the profit/loss before taxation and Zakat. The taxation includes withholding tax and permanent tax. Withholding will be charged to the international companies that provides on sites services to the bank.

2.4 RETURN ON ASSET

Return on asset also known as ROA is used to measure the profitability of bank. Basically there are several ratios that are typically used to measure profitability of bank.

According to **Iqbal, 2005** the two most often used are return on asset (ROA) and return on equity (ROE). ROA calculate base on net income for financial year divided by total asset for the current year. Both measures are closely tied to the key item in the income statement, net income have been used in most structure-performance studies and are included here to reflect the bank's ability to generate income from non-traditional services.

ROA shows the profit earned per dollar of assets and most importantly, reflects the management's ability to utilize the bank's financial and real investment resources to generate profits. For any bank, ROA depends on the bank's policy decisions as well as uncontrollable factors relating to the economy and government regulations. Many regulators believe return on assets is the best measure of bank efficiency (**Abdel-Hameed M. Bashir, 2003**).

2.5 INFLATION RATE

In economics the inflation rate is a measure of inflation, the rate of increase of a price index. It is the percentage rate of change in price level over time. The rate of decrease in the purchasing power of money is approximately equal. Inflation rate refers to a general rise in prices measured against a standard level of purchasing power. Prices of goods and

services fluctuate over time, but when prices change too much too quickly, the effects can shock an economy. The measurement to measure inflation rate is Consumer Price Index. The Consumer Price Index (CPI), the principle gauge of the prices of goods and services, indicates whether the economy is experiencing inflation, deflation or stagflation. The effect of inflation on bank profitability was first discussed by **Revell (1980)**. Revell believed that inflation could be a factor in the causation of variations in bank's profitability. This hypothesis was empirically tested by **Bourke (1989)** and **Molyneux and Thornton (1992)**. Using the consumer price index (CPI) as a proxy for inflation, both studies found that inflation had a significant relationship with profit. Although the first empirical testing on inflation was done by Bourke (1989), **Heggested (1977)** tried to measure the effect of inflation on profitability in his study. Heggested used per capital income as the independent variable instead of CPI. Heggested's findings, however, did not indicate any relationship between per capital income and a bank's profitability.

2.6 GROSS DOMESTIC PRODUCT (GDP)

The GDP is a basic measure of the health of a country's economy because it is a measure of the overall economic output of that country the GDP is essentially the market value of all the goods and services that are made within a country during one year and the higher the GDP, the higher the standard of living of that country (**Dawn, 2010**). Previous study also found that the higher GDP of country, the higher bank profitability (**Abdel Hamid M. Bashir, 2003**).

2.7 OVERHEAD COST

In business overhead cost or overhead expense refers to an ongoing expense of operating a business also known as Operating Expenses such as rental, electricity, wages and others. The term overhead is usually used to group expenses that are necessary to the continued functioning of the business, but cannot be immediately associated with the products or services being offered do not directly generate profits. Closely related accounting concepts are fixed costs versus variable costs and indirect costs versus direct costs. Overhead expenses are all costs on the



income statement except for direct labor, direct materials and direct expenses. Overhead expenses include accounting fees, advertising, depreciation, insurance, interest, legal fees, repairs, supplies, taxes, telephone bills, travelling and utilities costs. **Abdel Hamid M. Bashir** found that the higher overhead cost the higher profit earned by bank. The counter intuitive finding about the association between performance and overheads suggests that high profits earned by banks may be appropriated in terms of higher wages and salaries or investment in costly technology used by these banks.

2.8 RISK-WEIGHTED CAPITAL RATIO (RWCR)

Capital adequacy ratio is the ratio which determines the capacity of the bank in terms of meeting the time liabilities and other risks such as credit risk, operational risk and other external risk. In the simplest formulation, a bank's capital is the cushion for potential losses, which protects the bank's depositors or other lenders.

Banking regulators in most countries define and monitor RWCR to protect depositors, thereby maintaining confidence in the banking system. The higher WCR will lead to higher confident among investor. So it will lead to higher profit.

2.9 HYPOTHESIS

Hypothesis 1

- i. H_0 : There are no significant relationships between inflation rate and International Islamic Bank profitability.
- ii. H_1 : There are significant relationships between inflation rate and International Islamic Bank profitability.

Hypothesis 2

- i. H_0 : There are no significant relationships between gross domestic product (GDP) and International Islamic Bank profitability.
- ii. H_1 : There are significant relationships between gross domestic product (GDP)

and International Islamic Bank profitability

Hypothesis 3

- i. H_0 : There are no significant relationships between Overhead Cost and International Islamic Bank profitability
- ii. H_1 : There are significant relationships between Overhead Cost and International Islamic Bank profitability

Hypothesis 4

- i. H_0 : There are no significant relationships between risk-weighted capital ratio (RWCR) and International Islamic Bank profitability
- ii. H_1 : There are significant relationships between risk-weighted capital ratio (RWCR) and International Islamic Bank profitability

3.1 RESEARCH METHODOLOGY

Based on Uma Sekaran "Research Methods for Business", 4th Edition (2003), business research is defined as an organized, systematic, data-based, critical, objective, scientific inquiry or investigation into specific problem, undertaken with the purpose of findings answers or solution to it. Methodology is the system of methods followed by a particular discipline. Thus, Research Methodology defines the way how the researcher conducts the research.

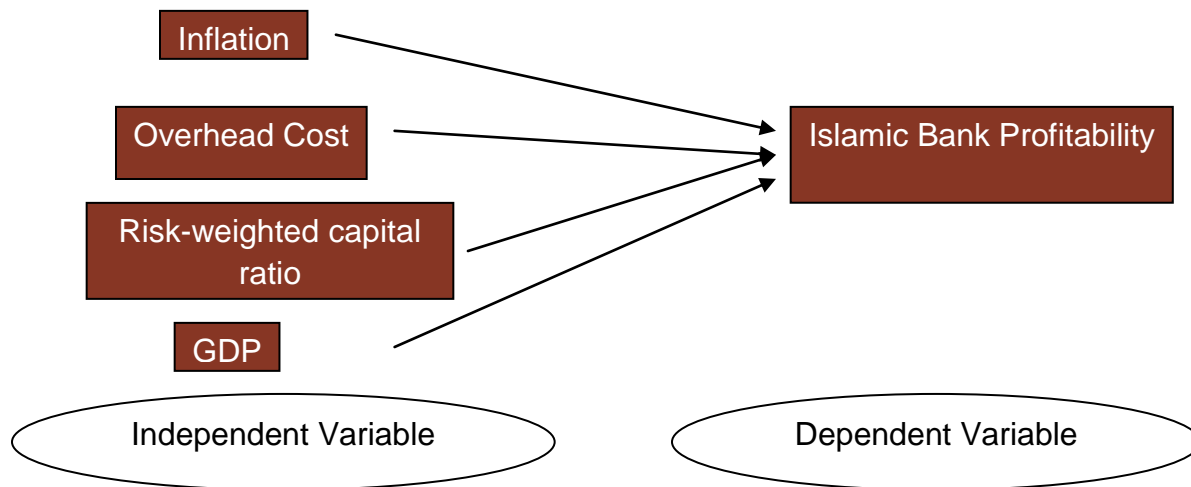
3.2 THEORITICAL FRAMEWORK

Theoretical framework is the network on how these variables are associated with each other. It consists of dependent and independent variables that are believed to have relationships towards the research topic. On the other hand, an independent variable influences the dependent variable in either a positive or negative way. The dependent variable can be defined as the phenomenon or characteristics hypothesized to be the outcome, effect, consequent or output of some input variables. The purpose of this variable is to identify the output or presumed effect of one or more independent variables. Dependent variable is the



variable of primary interest to the researcher. Through the analysis of the dependent variable, it is possible to find answers or solutions to the problems. Independent variables can be defined as the

characteristics hypothesized to be the input previous variable. It is assumed to an effect the dependent variable and is manipulated, measured or selected in order to measure the outcome of dependent variable.



3.3 RESEARCH DESIGN

The type of this research is explanatory research which focuses on 'why' question.

The procedure for collecting data and attempt to analyze data which have relationship between dependent variable (international Islamic bank profitability) and the independent variables (inflation, gross domestic product, overhead cost and risk-weighted capital ratio). The discussion will provide in depth understanding on the relationship of variables. It will focus on profit of International Islamic Bank that operated in Malaysia.

3.4 DATA COLLECTION METHOD

This study used secondary data which is obtaining from Bank Negara Malaysia (BNM) website to collect data for CPI which indicator to inflation and Gross Domestic Product (GDP) and Al-Rajhi Bank published annual report. From Al-Rajhi annual report we can gather the data for ROA, overhead cost and RWCR. Secondary data is the data that have been previously collected for some project other than one at hand. All data including qualitative data was obtained from published journal, article, books, and

news paper. Due to constraints on the availability of data, sample period for this study is only for 3 year period which is from year 2008 until 2010.

3.5 DATA ANALYSIS

Regression analysis describes the way in which one variable is related to another. It derives an equation that can be used to estimate the unknown values of one variable on the basis of the unknown values of another variable. Researcher would use the aid of software such as Microsoft Excel and EVIEWS to analyze and process the data. It is simplest method to be used in analyzing raw data which can be used for panel or series data. There are two types of linear regression analysis which are simple linear regression analysis and multiple linear regression analysis. In this research, the researcher only uses multiple linear regressions.

3.5.1 Multiple Regression Analysis

A multiple regression analysis involves more than one independent variable. This model of analysis is done to



examine the simultaneous effects of several independent variables on a dependent variable. For this study researcher use multiple regression analysis models in order to determine how inflation, GDP, overhead cost, risk-weighted capital ratio (RWCR) influences International Islamic Bank profitability. If y is dependent variable, and x is independent variables, regression analysis will show how the changes in x cause the changes in y .

3.6 EMPIRICAL MODEL

This is the general linear model for estimation purpose:

$$I_{ijt} = \alpha_0 + \alpha_i Bit + \beta_j X_{jt} + \gamma_t M_{jt} + \delta_j C_j + \epsilon_{ijt}$$

Equation 3.1

Where,

I_{ijt} = ROA for bank i in country j at time t

X, M, C = Vectors of different independent variables

Bit = Bank Variables for bank i in country j at time t

α, β, γ and δ = Coefficients

ϵ_{ijt} = Error term

This equation has been taken from the previous research (Abdel Hamid M. Bashir, 2003) that study on Determinants of Profitability in Islamic Bank in eight Middle Eastern countries between 1993 and 1998.

Thus, above equation have been modified in this research as follow:

$$It = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_t$$

Equation 3.2

Where,

It = ROA at particular year

α = Regression constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficient

X_1, X_2, X_3, X_4 = Determinant (Inflation, GDP, Overhead Cost and RWCR)

ϵ_t = Error term

3.7 EVALUATION OF RESULTS

After researcher has the regression analysis result by using the EViews software, the regression can be evaluated based on below determinant:

- Testing the overall Explanatory Power (Coefficient of determination (R^2))
- Test of Significant of Coefficient Estimates (t-stats)
- F-statistics

3.7.1 Coefficient of determination (R^2)

The coefficient of determination (R^2) is used to determine how well the regression line fits the data. It also measures the percentage of a change in the independent variable that can be measured or explained by the change in the dependent variables. The value of R^2 ranges from 0 to 1. If the value is 0 it shows that none of the independent variables explain the changes in the dependent variable, if the value is 1 it shows that all the changes in the dependent variable is explained by the variation in independent variable used in the regression. As a rule of thumb, the higher the value of R^2 , the higher the explanatory power of the estimated equation and the more accurate for forecasting purposes.



3.7.2 Test of Significant of Coefficient Estimates (t-stats)

The t-stat is used to determine if there is a significant relationship between the dependent and each independent variable. T- Stat is used to determine whether there is a significant relationship between the dependent and each of the independent variable. The rule of thumb for t critical value is 2. If the calculated t stat is greater than critical t value, independent variable is significant to dependent variable at 95% confidence level. However if the t-stat is less than critical t value the result is vice versa.

Computed T- value > Critical T- value, reject Ho

Computed T- value < Critical T- value, accept Ho

3.7.3 F-statistics

The F-statistics is used in a multiple regression analysis. F-statistics is used to test the hypothesis that the variation in the independent variable (inflation, GDP, overhead cost and risk-weighted capital ratio) explains a significant variation in the dependent variable (International Islamic Bank Profit). In order to conduct the F test, the calculated F values need to be compare with the critical value of the F distributions, researcher use the F distribution table which uses 5% significant level. As a rule of thumb for F stats, if F computed value is greater than 2, then the overall independent variables are significant in explaining the changes in the dependent variable.

Computed F-value > Critical F-value, reject Ho

Computed F-value < Critical F-value, accept Ho

4.1 DATA ANALYSIS AND FINDING

All the data that collected from several trusted sources which are officially website of Bank Negara and published annual report of Al Rajhi Bank has been process by Eviews software. All the data have been gathered to generate result for the research questions. In this research, researcher used the data from every quarter in year 2008 until 2010. The data is limited since Al Rajhi Bank was established in year 2007 and Al Rajhi Bank not yet publishing the full report for year 2011 during the research has been conducted. The dependent variable is International Islamic Bank in Malaysia while the independent variables are Inflation rate, GDP, overhead cost and risk weighted capital ratio (RWCR).

According to Abdel-Hameed M. Bashir, 2003 return on asset (ROA) is the most commonly used to calculate bank profitability accurately. The data for net income and total assets of Al-Rajhi Bank collected from the annual report that published at bank website. This research used multiple linear regression in order to generate and analyst the finding. All the independent variables are tested toward the dependent variable. This research regress the inflation rate, GDP, overhead cost and risk-weighted capital ratio (RWCR) with return on assets (ROA).

Before inserting the data into the software, all the data need to be converted into return since every dependent variable and independent variables are in different unit because to generate the result, all the data must be in the same unit.



4.2 DESCRIPTIVE ANALYSIS

Table 4.1

Summary statistic data in quarterly of return on assets (ROA),
Inflation rates, GDP, Overhead Cost and RWCR from year 2008 to 2010

	ROA	OHC	INFLATION	GDP	RWCR
Mean	26.40352	50.20969	-9.762792	1.048711	-10.52740
Median	-13.03818	5.148462	-0.086580	2.037576	-11.10506
Maximum	410.5156	317.7125	175.0000	5.862985	72.58993
Minimum	-118.8906	-76.15475	-155.0000	-7.560918	-60.26684
Std. Dev.	149.4178	126.6480	86.58397	3.872739	34.73399
Skewness	1.526598	0.919731	0.177884	-0.887121	0.796867
Kurtosis	4.636765	2.650610	3.382222	3.034545	4.122963
Jarque-Bera	6.000503	1.752846	0.136332	1.574565	1.900519
Probability	0.049775	0.416269	0.934105	0.455080	0.386641
Sum	316.8422	602.5163	-117.1535	12.58453	-126.3288
Sum Sq. Dev.	245582.4	176436.9	82464.63	164.9791	13270.95
Observations	12	12	12	12	12

*** Significant at the 1% level,

** Significant at the 5% level,

* Significant at the 10% level

Table 4.1 show the statistic for inflation rate, Gross Domestic Product (GDP), overhead cost and risk-weighted capital ratio (RWCR) for the year 2008 until 2010. The overall observation is twelve for every independent variable. From the table, the overall mean is positive meanwhile for the overall median is negative. The lowest mean value is approximately -10.53 while the highest is 50.21. For median value, the lowest value is -13.04 while the highest value is 5.15. Standard deviation can show the volatility of the variable can be shown, the higher standard deviation, thus the higher volatile of the variable. It shows the sensitivity of the independent variables towards the dependent

variables. Based on the table, the overhead cost has highest sensitivity followed by inflation, Risk Weighted Capital Ratio and Gross Domestic Product respectively. High standard deviation means that small changes in independent variable will cause big changes in dependent variable. The skewness for entire variable is positive accepts for Gross Domestic Product (GDP). Kurtosis is statistical measure used to describe the distribution of observed data around the mean. Used generally in the statistical field, kurtosis describes trends in charts. A high kurtosis portrays a chart with fat tails and a low, even distribution which called leptokurtic. Whereas a low kurtosis portrays a



chart with skinny tails and a distribution concentrated toward the mean called platykurtic. In this research, value of three is a rule of thumb used to make the analysis. The kurtosis for the independent variables majority is more than three thus they are leptokurtic (distribution with a sharper peak and fatter tails compared to normal distribution). Only for overhead cost the value of kurtosis is 2.65 which is less than three called platykurtic (distribution with less peaked in the mean, and thinner tails compared to normal distributions). The Jargue-Bera value is a goodness-of-fit measure of departure from normality, based on the sample kurtosis and skewness. It describes how well it fits a set of observations. The range of value of Jargue-Bera approximately is between the ranges 0.136 to 1.9.

4.3 MULTIPLE REGRESSIONS

$$\text{ROA} = -3.4634 + 0.6566 \cdot \text{INFLATION} + 21.4060 \cdot \text{GDP}$$

The equation above shows the relationships between all the variables which are inflation, GDP, overhead and Risk-Weighted Capital Risk towards return on assets (ROA).

4.3.1 Coefficient of determination (R^2)

The coefficient of determination (R^2) is used to determine how well the regression line fits the data. Values of R^2 that are close to 1 imply that most of variability in dependent variable is explained by the regression model. The value of R^2 for this regression is 0.376984 that shows 37.70% of the changes in the dependent variable that is explained by the variation in independent variable used in the regression.

4.3.2 Test of Significant of Coefficient Estimates (t-stats)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.463380	47.41239	-0.073048	0.9438
INFLATION	0.656579	0.598031	1.097901	0.3086
GDP	21.40603	16.00826	1.337186	0.2230
OHC	0.742332	0.424680	1.747980	0.1240
RWCR	2.226956	1.992455	1.117695	0.3006

Table 4.2

T-test statistic is employed to test all hypothesis statements regarding the coefficient of individual independent variables. In this research the probability are between 0.1240 until 0.3086. However, to reject null hypothesis the probability should not

exceeding 0.1 which is at 10% significance level and 90% confident level.



Hypothesis 1

- i. H_0 : There are no significance relationships between inflation rate and International Islamic Bank profitability.
- ii. H_1 : There are significance relationships between inflation rate and International Islamic Bank profitability.

The probability for inflation is 0.3086. Thus, null hypothesis should be accepted since the probability for t-test is exceeding 0.1. The result also means that there is positive relationship between inflation and International Islamic Bank profit. The significant coefficient provides evidence that 0.6566 increases in inflation rate caused the International Islamic Bank profit increase by 1. However, this show that inflation did not give much significance to bank profit.

Hypothesis 2

- i. H_0 : There are no significance relationships between gross domestic product (GDP) and International Islamic Bank profitability.
- ii. H_1 : There are significance relationships between gross domestic product (GDP) and International Islamic Bank profitability.

The probability for gross domestic product is 0.2230. Thus, null hypothesis should be accepted since the probability for t-test is exceeding 0.1. The result also means that there is positive relationship between GDP and International Islamic Bank profit. The significant coefficient provides evidence that 21.4060 increases in GDP caused the International Islamic

Bank profit increase by 1. However, this still show that GDP did not give much significance to bank profit because of the probability significance is 0.2230 and level of confident is only 0.777@ 77.7%.

Hypothesis 3

- i. H_0 : There are no significance relationships between Overhead Cost and International Islamic Bank profitability
- ii. H_1 : There are significance relationships between Overhead Cost and International Islamic Bank profitability

The probability for Overhead Cost is 0.1240. Thus, null hypothesis should be accepted since the probability for t-test is exceeding 0.1. The result also means that there is positive relationship between overhead cost and International Islamic Bank profit. The significant coefficient provides evidence that 0.7423 increases in overhead cost caused the International Islamic Bank profit increase by 1. However, the probability is approximate 0.1 which can be conclude that the most significant compare to other independent variables.

Hypothesis 4

- i. H_0 : There are no significant relationships between risk-weighted capital ratio (RWCR) and International Islamic Bank profitability
- ii. H_1 : There are significance relationships between risk-weighted capital ratio (RWCR) and International Islamic Bank profitability



The probability for RWCR is 0.3006. Thus, null hypothesis should be accepted since the probability for t-test is exceeding 0.1. The result also shows that there is positive relationship between RWCR and International Islamic Bank profit. The significant coefficient provides evidence that 2.2270 increases in RWCR caused the International Islamic Bank profit increase by 1. However, this still show that RWCR did not give much significance to bank profit because of the probability significance is 0.3006 and level of confident is only 0.6964@ 69.64%.

F-statistic	1.058917
Prob (F-statistic)	0.442722

Table 4.3

Notes: *** Significant at the 1% level, ** Significant at the 5% level,
* Significant at the 10% level

H_0 : The dependant variable is not effected by at least one independent variable

H_1 : The dependant variable is effected by at least one independent variable

Based on result, researcher found that the probability F-stat is 0.4443 which is exceeding than 0.1. The null hypothesis has been accepted because the F-statistic is statistically not significant at 10% significant level. The result shows that International Islamic Bank profit not affected by at least one independent variable.

Since the F-statistic is not significant, it means that there is no relationship between the International Islamic Bank profit with inflation, GDP, overhead cost and RWCR.

5.1 RECOMMENDATION AND CONCLUSION

This chapter will discuss on the finding that have been analyze in first part. Second part will discuss on

4.3.3 Hypothesis Testing (F-statistics)

The F-statistics is used in a multiple regression analysis. F-statistics is used to test the hypothesis that the variation in the independent variable (inflation, GDP, overhead cost and risk-weighted capital ratio) explains a significant variation in the dependent variable (International Islamic Bank Profit).

recommendations from result of finding. Thirdly, the suggestions for future research that related to this research so that can improve the result on finding so that it more accurate. The last part will discuss on the conclusion of the study.

5.2 DISCUSSION ON FINDING

Bourke (1989) and **Molyneux and Thornton (1992)** found that inflation had a significant relationship with profit by using CPI as measurement of inflation. Bourke revealed a positive relationship between inflation and bank profitability. In this research, researcher found that that there have positive relationship between dependent variable and independent variables. However, the relationship is not significance supported by the coefficient value of 0.6566. If inflation rate is high, profit of bank also high since when inflation consumer intend to make saving rather than spending. Thus, it will generate profit to the bank. However, since Al-Rajhi Bank is still new, the depositors prefer to deposit to other bank that more stabile.



In this research, researcher found that there has positive relationship between GDP and International Islamic Bank profit. This supported by previous researcher, **Abdel Hamid M. Bashir** who also found that the higher GDP of country, the higher bank profitability. However, the relationship is not significance at 90% level of confident. GDP start to decrease in year 2008 quarter four till quarter two at the next following year due to high inflation in year 2008. Higher GDP will improve the standard living in Malaysia. However between years 2008 till 2010, the differentiation of the GDP value is not so obvious compared to bank profit. Thus, this affects the result of finding.

Basically, profit will be increase when the overhead cost reduced. Meanwhile, the researcher found that there has positive relationship between overhead cost and International Islamic Bank profit. This result supported by research done by **Abdel Hamid M. Bashir**. He suggests that high profits earned by banks may be appropriated in terms of higher wages and salaries or investment in costly technology used by the banks. Al-Rajhi Bank is still new in Malaysia since year 2007 and the bank takes time to gain economic scale in their cost.

Besides, researcher found that RWCR have positive relationship between International Islamic Bank profits. This is because high RWCR will increase the confident level among investor to make investment with International Islamic Bank in Malaysia. Thus it will increase bank profit.

However F-stat shows that all the independent variables are not significant to the dependent variable. Perhaps due to limitation data for observation that need to be analyze.

5.3 RECOMMENDATION

This research has attempted to analyze the relationship between dependent variable and independents variables. Besides that, the researcher need to determine which independent variables is most significant to the International Islamic Bank profit. From this study, several suggestions can be made. Firstly, International Islamic Bank itself needs to

control their overhead cost so that it parallel with the profit for the financial year. Furthermore, the bank itself need to do more promotion so that Malaysian will more realize and aware for their special and advantage of their Islamic product. In other hands, the bank also needs to make innovation into their product so that they can compete with local Islamic Bank.

5.4 SUGGESTION FOR OTHER RESEARCHER

There have three suggestions to other researcher that related to this research. Firstly, to add up a few number of International Islamic Bank that operates in Malaysia in this research so that number sample can be increase. The panel data indicate more accurate result for the finding that represents all the International Islamic Bank in Malaysia. Secondly, future research needs to include longer period of analysis. The longer period are taken to analyze for better view and finding result. Lastly, researcher suggests increasing number of potential and important independent variables to reduce specification errors in the data so that result for F-stat is less than 0.1 or perhaps less than 0.01. It also to increase the value of Coefficient of Determination (R^2).

5.5 CONCLUSION

Based on this research, we can conclude that inflation, GDP and RWCR does not significance to International Islamic Bank profit. However, this non significance result occurs due to limited data available since International Islamic Bank is still new in Malaysia. The earlier International Islamic Bank established in Malaysia was in year 2007 which is Kuwait Finance House (M) Berhad. However, Overhead cost is the most significance compared to other independent variables. This is because the probability of t-stat is approximately 0.1 which is 0.124. This also supported by highest standard deviation value compared to other variables. The standard deviation is 126.648. Standard value shows the volatility and sensitivity of the variables.



REFERENCES

Professor Sudin Haron, (2004). “Determinants of Islamic Bank Profitability,”

Hassan, Ph.D.M. Kabir, (2001). “Determinants of Islamic Banking Profitability,”

Bourke, P. (1989). “Concentration and other determinants of bank profitability in Europe, North America and Australia.”

Molyneux, P., and J. Thornton (1992). “Determinants of European bank Profitability: A Note.”

Bashir, A. (2000), “Determinants of profitability and rates of return margins in Islamic banks: some evidence from the Middle East.”

Nienhaus, V. (1983), “Profitability of Islamic Banks Competing with Interest Banks,”
Khan, M. F. (1983), “Comments on Volker Nienhaus: Profitability of Islamic banks Competing with Interest Banks”

Homoud, Sami Hassan (1994), “Progress of Islamic Banking: The Aspirations and the Realities,”

Aggarwal, R. and T. Yousef (2000), ‘Islamic Banks and Investment Financing,’

Bashir, A. (1999), ‘Risk and Profitability Measures in Islamic Banks: The Case of Two Sudanese Banks,’

Hassan, M. Khabir (1999), “Theory of profitability Measurement”

Taib, Jamaliah (2008), “Understanding Economics Theory and Application”

Bank Negara Malaysia (2007-2010) “Annual Report”

<http://www.bnm.gov.my/index>

Kuwait Finance House (2008-2010) “Annual Report”

<http://www.kfh.com>

Al-Rajhi Bank (2008-2010) “Annual Report”

<http://www.Al-Rajhi.com>

Asian Finance Bank (2008-2010) “Annual Report”

<http://www.afb.com>

APPENDIX

SUMMARY PROFIT OF THREE INTERNATIONAL ISLAMIC BANKS IN MALAYSIA FOR YEAR 2008, 2009 AND 2010

	2010	2009	2008
AL-RAJHI BANKING & INVESTMENT CORPORATION (MALAYSIA) BHD			
TOTAL DISTRIBUTABLE INCOME/GROSS PROFIT	236,938,000	149,556,000	2,096,000



TOTAL NET INCOME	132,217,000	49,156,000	(14,584,000)
PROFIT/LOSS BEFORE TAXATION & ZAKAT	81,300,000	(63,937,000)	(106,222,000)
NET PROFIT/LOSS FOR FINANCIAL YEAR	10,366,000	(59,708,000)	(96,805,000)

ASIAN FINANCE BANK BERHAD

TOTAL DISTRIBUTABLE INCOME/GROSS PROFIT	64,304,212	47,818,798	25,295,811
TOTAL NET INCOME	39,679,926	11,945,446	12,495,121
PROFIT/LOSS BEFORE TAXATION & ZAKAT	4,209,830	(20,528,865)	(5,303,028)
NET PROFIT/LOSS FOR FINANCIAL YEAR	2,592,662	(15,753,110)	(3,754,028)

KUWAIT FINANCE HOUSE (MALAYSIA) BERHAD

TOTAL DISTRIBUTABLE INCOME/GROSS PROFIT	284,734,000	412,656,000	263,125,000
TOTAL NET INCOME	122,208,000	201,732,000	134,744,000
PROFIT/LOSS BEFORE TAXATION & ZAKAT	(30,163,000)	38,364,000	30,461,000
NET PROFIT/LOSS FOR FINANCIAL YEAR	(25,976,000)	44,357,000	20,333,000

THE VALUE AFTER CONVERT INTO RETURN

	ROA	INFLATION/CPI	GDP	OVERHEAD COST	RWCR
2008Q1	-83.64	-51.61	-1.4	-76.15	18.81
2008Q2	-30.82	-6.67	3.1	92.51	-59.54
2008Q3	-3.67	28.57	4.6	-20.65	-60.27



2008Q4	35.53	33.33	1.2	191.30	-29.87
2009Q1	-84.41	16.67	-1.3	-71.76	-7.63
2009Q2	-8.12	175.00	2.0	11.98	-14.58
2009Q3	-17.95	6.49	3.0	26.55	-16.18
2009Q4	177.83	-46.34	-3.5	208.41	-18.19
2010Q1	-84.91	-20.45	-7.6	-70.00	72.59
2010Q2	-118.89	-140.00	4.6	-1.68	-3.13
2010Q3	410.52	42.86	5.9	-5.70	-4.73
2010Q4	125.39	-155.00	2.0	317.71	-3.61

DESCRIPTIVE STATISTIC

	ROA	OHC	INFLATION	GDP	RWCR
Mean	26.40352	50.20969	-9.762792	1.048711	-10.52740
Median	-13.03818	5.148462	-0.086580	2.037576	-11.10506
Maximum	410.5156	317.7125	175.0000	5.862985	72.58993
Minimum	-118.8906	-76.15475	-155.0000	-7.560918	-60.26684
Std. Dev.	149.4178	126.6480	86.58397	3.872739	34.73399
Skewness	1.526598	0.919731	0.177884	-0.887121	0.796867
Kurtosis	4.636765	2.650610	3.382222	3.034545	4.122963
Jarque-Bera	6.000503	1.752846	0.136332	1.574565	1.900519
Probability	0.049775	0.416269	0.934105	0.455080	0.386641
Sum	316.8422	602.5163	-117.1535	12.58453	-126.3288
Sum Sq. Dev.	245582.4	176436.9	82464.63	164.9791	13270.95
Observations	12	12	12	12	12

Dependent Variable: ROA
 Method: Least Squares
 Date: 04/3/12 Time: 00:53
 Sample: 1 12
 Included observations: 12



Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.463380	47.41239	-0.073048	0.9438
INFLATION	0.656579	0.598031	1.097901	0.3086
GDP	21.40603	16.00826	1.337186	0.2230
OHC	0.742332	0.424680	1.747980	0.1240
RWCR	2.226956	1.992455	1.117695	0.3006
R-squared	0.376984	Mean dependent var		26.40352
Adjusted R-squared	0.020975	S.D. dependent var		149.4178
S.E. of regression	147.8424	Akaike info criterion		13.12451
Sum squared resid	153001.7	Schwarz criterion		13.32655
Log likelihood	-73.74705	Hannan-Quinn criter.		13.04970
F-statistic	1.058917	Durbin-Watson stat		2.651016
Prob(F-statistic)	0.442722			

Estimation Command:

=====
 LS ROA C INFLATION GDP OHC RWCR

Estimation Equation:

=====
 ROA = C(1) + C(2)*INFLATION + C(3)*GDP + C(4)*OHC + C(5)*RWCR

Substituted Coefficients:

=====
 ROA = -3.46338043939 + 0.65657900613*INFLATION + 21.406032539*GDP + 0.742332063332*OHC + 2.22695634308*RWCR