DETERMINANTS OF THE PROFITABILITY OF ISLAMIC BANKS
A SURVEY OF ZANZIBAR ISLAMIC BANKS.

By
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A dissertation of the Requirements for Masters of Science in Accounting and Finance of Mzumbe University
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CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a Thesis entitled “DETERMINANTS OF THE PROFITABILITY OF ISLAMIC BANKS IN ZANZIBAR, in partial fulfillment of the Requirements for the Award of the Degree of Master of Accounting and Finance of Mzumbe University.

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## LIST OF ABBREVIATION

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>PBZ</td>
<td>People’s Bank of Zanzibar.</td>
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<tr>
<td>GDP</td>
<td>Gross National Product.</td>
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<tr>
<td>PLS</td>
<td>Profit and Loss Sharing.</td>
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<td>ROA</td>
<td>Return on Assets.</td>
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<tr>
<td>ROE</td>
<td>Return on Equity.</td>
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<tr>
<td>EVA</td>
<td>Economic Value added.</td>
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<tr>
<td>CPI</td>
<td>Consumer Price Index</td>
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<td>BOT</td>
<td>Bank of Tanzania.</td>
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<td>KCB</td>
<td>Kenya commercial Bank</td>
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<td>NBC</td>
<td>National Bank of Commerce.</td>
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ABSTRACT
The aim of this study was to determine the determinants of the profitability of Islamic banks in Zanzibar as measured by return on assets (ROA).
Nine variables were drawn from the Islamic banking literatures which were divided into internal and external (macroeconomic) variables. The internal variables were capital, bank size, liquidity, and asset quality and expenses management while external variables were Gross Domestic (GDP), Inflation, Money Supply and Competition. Secondary data was collected from 3 Islamic banks in Zanzibar from year 2008 to 2012.
Financial ratios technique was applied to calculate on these variables and Ordinary Least Square (OLS) and Generalized Least Square (GLS) was used to run the regression model using STATA econometric software.

The estimation result showed that expenses management, money supply and Competition were significant in determining the Islamic banks profitability. In terms of expenses management which has a significant positive relationship with the profitability of Islamic banks, this can lead the Islamic banks to find opportunity for company to search for good quality’s employees. Other than that, banks should also regulate policy and manage the maximum expenses in each department, so that it helps to reduce the cost of banks and maximize the profitability of Islamic banks.
In terms of money supply, the policy maker should consider the possibility of increasing the money supply when Islamic banking industries is having recession problem, this may help Islamic banks to have more opportunities to improve profit by increasing their financing activities. On the other hand Competition which is negatively related to profitability of Islamic bank. Islamic bank should enhance their competitive advantages in order to maximize their profitability.

Finally, for future studies, it is recommended to use more than one dependent variable, instead of using return on assets than to use return on equity is better, also more sample size and determinant factors can be included in determining the effects on bank profitability as the Islamic banks in Zanzibar will expected to be increased.
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CHAPTER ONE
RESEARCH OVERVIEW

1.1 Introduction
This chapter explains the proposal on the topic concern about the impact on the determinants of the profitability in Islamic banks in Zanzibar. It comprises background and statement of the problem, objectives of the study, research questions, and significance of the study and limitation of the study. Islamic banking is playing an important role in today’s banking industry. Islamic banking has grown rapidly in Zanzibar recently. There are now total of 3 Islamic banks in Zanzibar. During these years, there are more researchers started to carry out their research to determine the factors affecting the profit of Islamic banks in many countries.

1.2 Research Background
Islamic finance has grown rapidly since it first emerged in the 1970s. Current global Islamic banking assets and assets under management have reached USD750 billion and is expected to hit USD1 trillion BNM (2011).
There are over 300 Islamic financial institutions worldwide across 75 countries. Based on Asian Banker Research Group, the global Islamic industry has an average growth of 15% to 20% annually and The World’s 100 largest Islamic banks have set an annual asset growth rate of 26.7% BNM (2011).
Zanzibar Islamic financial industry was started from 2008. Most of the conventional banks in Zanzibar have involved in Islamic industry as well. They have a subsidiaries bank that running the Islamic Shariah concept or have an Islamic window to operate the Islamic product and financing.
This study is shown that how the determinants affect profitability for Islamic Bank in Zanzibar and better understanding about importance of determinants of profitability. There are few studies about Islamic banking, they found out there are many factors influence the profitability of Islamic bank.
1.3 Problem Statement
Islamic banking is based on profit and loss sharing (PLS) between the borrower and the bank (Khan and Mirakhor 1987). Islamic banks maintain profit by mixing investment and commercial banking operations to engage in acceptable rates of return for depositors but in accordance to Islamic rules and principles. Islamic banking rules are according to the Islamic shariah derived from the Quran. The three main practices clearly prohibited in the Quran and the prophet’s sayings are: Riba (Interest), Gharar (Uncertainty), and Maysir (Betting). Nowadays Muslims and non-Muslims as well get trouble on how Islamic bank operate as the interest is free and as we know that interest is key factor for the success of the business in the banks.

Therefore the aim of this research is to assess the determinants of profitability of Islamic banks in Zanzibar. While there is abundant of literature on performance studies, these studies are confined to convectional banks. Up to this date, there has been little research on the profitability of Islamic banks.

1.4 Specific Objectives
The purpose of this research was to closely examine how internal factors such as capital ratio, bank size, asset quality, liquidity and expenses management affect the Islamic banks’ Return of Asset (ROA). In addition, the objectives of this research was to examine how external factors such like Gross Domestic Product (GDP), inflation rate, money supply and competitions affect the ROA of Islamic banks. It is critical to determine which factors essentially determine the ROA of the Islamic banks.

1.5 Research Questions.
In this competitive banking industry, what are the factors that affect the Return of Asset (ROA) of Islamic banks in Zanzibar?

1.6 General Objective
The objective of this paper is to determine the factors that affect the Return of Asset (ROA) of Islamic banks in Zanzibar.
1.7 Hypotheses of the Study (for Quantitative Research)

The major hypothesis of this study is to evaluate whether external factors as well as internal factors are important in explaining Islamic banks’ profitability. The internal factors include capital ratio, bank size, liquidity, asset quality and expenses management while external factors include Gross Domestic Product (GDP), inflation, money supply and competition. This study follows an extensive literature that focuses on internal as well as external factors as main determinants of banks’ profitability.

1.8 Significance of the Study

In this study, we examine a series of variables by introducing internal and external factors that may significantly affect the Islamic banks’ profitability. The study can be used as a reference for Islamic banks to focus and control over the variables that bring negative effects to its profitability.

The finding from this study is beneficial to many parties such as the management, Policy maker, Regulators and Academic. The study contributes to the more understanding of the factors that influence Islamic banks” performance. This study of comparison is useful in providing valuable information to relevant parties, such as bank customers, bank management and bank regulators in constructing an efficient management policy decision for Islamic banks to gain higher profits. This research also contributes to the relationship between Islamic banks” performance and Islamic financial development as a whole.

In the last four decades, many studies have been conducted to investigate the profitability determinants of conventional banks. Alkasim, F.A. (2005), Bashir, A.M. (2003) and Bashir, A&Hassan, M. (2004) have been conducted to determine the profitability of Islamic banks. Hence, this study provides a significant additional evidence to postulate some profitability theories related to Islamic banking.
1.9 Organization of the Study
This study is divided into five (5) chapters; the first chapter consists a brief review of introduction about Islamic banking in Zanzibar, background of the research problem, that is a brief explanation of the topic being studied, problem statement consisting of the contracts in Islamic banking, specific objectives, research questions, general objectives, significance of the study and the organization of the study.

The proceeding chapters can be arranged as follows; Chapter two (2) holds an explanation and presents both the theoretical and Empirical literature review together with conceptual framework.

Chapter three (3) presents the details of procedures and methodology used. The chapter includes type of research, study area, research design, data sources and collection methods, study population, data analysis, model specification, variables and measurements as well as statistical approach which can be used.

Chapter four (4) entails the presentation of research findings and discussion that is a critical assessment of what has been found.

Lastly, chapter five (5) gives a summary, conclusion and key contribution which will be made by this study. It is also provide the recommendations, policy implications, limitations and highlights the area for further study in the Islamic banking.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter discusses the key concept which can be used in this study as well as looking at a number of theories that have been given by different authors concerning their views relating to effective of the determinants of the Profitability in Islamic banking in Zanzibar, the hypothesis based on the theoretical can also be developed in our context after the review.

2.2 Definition of the Key Concepts.
2.2.1 Return on assets (ROA)
Bank profitability is defined by Rose (2002) as the net after tax income or net earnings of a bank (Usually divided by a measure of bank size).

Return on assets (ROA) refers to the profitability on the assets of the firm after deduct all the expenses and taxes Van Horne and Wachowicz (2005). It measures the amount a firm is earning after tax for each Tzs. Invested in assets of the firm. Generally, a higher ratio indicates efficient utilization of assets of the firm and better managerial performance while a lower ratio means inefficient use of assets. Many studies have used return on assets as a dependent variable in explaining bank’s profitability. For instances, Ben Naceur (2003) used net interest margin (NIM) and return on assets as dependent variables in his study of determinants of the Tunisian banking industry profitability. Other country studies reviewed by Akther, Raza, Orangzab and Akram (2011) and Moin (2008) also used return on assets as a measure of profitability in their studies of efficiency and performance of banks in Pakistan. Besides, some authors stressed out the importance of using Return on Assets (ROA) as a measure of profitability. Alkassim (2005) used Return on Assets as the dependent variable as his study of profitability of Islamic and conventional banking in GCC countries. He put heavy emphasis on ROA as it precisely measures asset performance in the banking industry.
Moreover, Bashir and Hassan (2004) and Ben Naceur (2003) have applied Return on Asset as a performance indicator and as dependent variables because the author believed that Return on Asset will help to identify the effectiveness of bank assets.

Hassan and Bashir (2003) included both Return on Asset (ROA) and Return on Equity (ROE) as measures of overall performance in his study of determinants of Islamic banking profitability. Hassan stressed that Return on Asset can precisely reflect the management ability to utilize the bank’s financial and real investment resources to generate profits. Thus, many regulators believed that Return on Asset is the best measure of bank efficiency. According to Flamini, McDonald and Schumacher (2009), ROA is a better key proxy than ROE because an analysis on ROE neglects financial leverage.

In other hands, there is another view on the using of Return on Asset (ROA) as dependent variables. In the study of Heffernan and Fu (2008), the authors found that economic value added and net interest margin did better than conventional measures of profitability such as Return on Asset and Return on Equity (ROE). Economic value added (EVA) is a value-based performance measure which takes the opportunity cost of capital into consideration. According to Weaver (2001), EVA links economic, accounting and shareholder returns.

For Islamic banks to make profit and to satisfy the borrower’s needs of cash, they have to conduct transactions that do not violate Islamic rules by looking for allowed contracts that can achieve the required goal. Mostly, they are based on sale and purchase transactions, accompanied by a degree of risk. There are five main contracts: Mudarabah, Musharakah, Murabahah, Ijarah, and Salam.

Mudarabah: Is a contract between two parties, one provides capital and other provides the labor to form a partnership to share the profits by a certain agreed proportions.

Musharakah: Is a financial contract between two or many parties to establish a commercial enterprise based on capital and labor. The profit and loss is shared at an agreed proportion according to amount of contribution Hassan and Zaher (2001).
Murabahah: Refers to a sale of a good or property with an agreed profit against a deferred or a lump sum payment. There are two contracts in Murabahah the first contract is between the client and the bank, whereas the second contract is between the bank and supplier. The client (purchaser) orders a certain commodity through the bank, the bank then buys the commodity from the supplier and sells it to the client with specified profit whereby the client can make a lump sum or a deferred payment to the bank. Iqbal and Molyneux (2005).

Ijarah (Leasing): In which two parties involved therein, the lessee and the leaser (bank) is the real owner of the asset or property and it is rented out to the lessee until full payment is received. The lessee has the option to keep the asset at contract maturity or give it back to the bank. If all payment are received, the lessee can keep the asset at a higher price than the usual price Iqbal and Molyneux (2005).

Salam: Is another contract where full payment for a good is paid in advance but the delivery of the goods is made at an agreed future date Iqbal and Molyneux (2005).

Furthermore, Islamic banks combine commercial banking activities and investment banking operations in order to generate acceptable rates of return for depositors but in compliance with Islamic rules and principles Al-kasim (2005). Unlike convectional banks treat money as a mean to facilitate transactions for trading purpose Al-kasim, (2005).

2.2.2 Capital ratio
Capital ratio is measured by bank equity to total assets. A positive relationship of capital efficiency on bank’s profitability has been suggested by Abreu and Mendes (2002). Capital adequacy reflects the bank’s ability to holds its own funds to support the business and also to withstand losses. It could also act as safety net for adverse selection. Therefore a well capitalized bank is assumed to have lower bankruptcy cost and thus, enhance its profitability.
Capital ratio is a valuable tool for assessing safety and soundness of banks, some of the researchers explain that when a bank with high capital ratio or more equity capital is showing the bank is more safety and is an advantage to get higher profitability (Vong and Chan, 2009). Vong and Chan proved that capital will positively affect profitability with their statistically research. This result is consistent with Abreu and Mendes (2002) which also found a positive relationship between capital and profitability. In the study, Abreu and Mendes proposed that a well capitalized bank faces lower expected bankruptcy costs and show profit later. A study by Bashir (2000) also found the same result with a measure of capital by using the equity to total asset ratio for Islamic banks.

Even most of the researcher found there are significant positive relationships between the capital ratio and profitability but Athanasoglou, Delis and Staikouras (2006) and Athanasoglou, Delis and Staikouras (2005) found that capital is negatively related to banks’ profitability for conventional bank.

Wasiuzzaman and Tarmizi (2010) and Pramato and Ismail (2006) found that the relationship between capital and Islamic bank profitability is negative in Malaysia. Berger argues that when the value of capital ratio is reduced, it will result in a lower agency cost and improve the firm profitability (as cited in Wasiuzzaman and Tarmizi, 2010). Pramato and Ismail who have also proposed the agency cost hypothesis explained that constraining the managers to maximize their own utility would increase the value of shareholders. Hassan and Bashir (2003) found the same result which is found a statistically significant negative relationship between the capital and profitability. High capital ratio reduces the profitability of a bank.

2.2.3 Bank size
Bank size is one of the internal determinants since a firm expansion is the responsibility of bank’s management. According to Boyd and Runkle (1993), the size of a bank is often associated with the concept of economic of scale. Economy theory explained that if an industry is subjected to economic of scale, institution could be more efficient to produce efficient to produce at lower cost. It is expected that economic of scale or bank
size is positively related to bank’s profitability. To compare large banks with small banks, large banks are assumed to enjoy economies of scale; they could produce a large quantity of products cheaply and efficiently. Therefore large banks able to generate a higher rate of return than small banks.

Bank size is one of the variables to determine banks’ profitability. Boyd and Runkle (1993) showed that size of a bank is also associated with the concept of economies of scale. Referring to Idris et al (2011) and Bahsir (2003), they found that the bank size is a very strong variable that will positively influence the level of profitability. Idris et al believed that the larger the bank would have an advantage in negotiating the price of input, and it can reduce bank’s average cost. Therefore, the bank is able to enjoy the economics of scale and improve its profitability.

2.2.4 Liquidity
Liquidity refers to the internal factors to measure bank’s profitability. A number of proxies on the relationship of liquidity such as total loan to total assets and financing to total deposit were studied. Liquidity ratio enables to determine a percentage of assets that comprise the loan portfolio. Most of the studies have done the relationship of liquidity of a bank and its profitability on conventional banks as well as Islamic banks. Kosmidou, Tanna and Pasiours (2005) did a research on UK commercial banks and revealed a negative sign of liquidity on NIM. Bourke (1989) and Sufian and Habibullah(2010), among others; found a positive significant result between the level of liquidity and profitability with the proxy of liquid assets to total assets and loans to total assets. It indicates the higher liquidity of a bank, the higher the profitability of the bank.

Liquidity ratio is one of the internal factors to measure bank’s profitability. A number of proxies on the relationship of liquidity such as total loan to total asset and total financing to total deposit was studied. Liquidity ratio enables to determine a percentage of assets that comprise the loan portfolio. Most of the studies have done the relationship of liquidity of bank and its profitability on conventional banks as well as Islamic banks.
Kosmidou, Tanna and Pasiours (2005) did a research on UK commercial banks and revealed a negative sign of liquidity on NIM. However, it is only significant in the presence of external factors. Bourke (1989) and Sufian and Habibullah (2010), among others; found a positive significant result between the level of liquidity and profitability with the proxy of liquid assets to total assets and loans to total assets. It indicates the higher liquidity of a bank, the higher profitability of the bank.

Nevertheless, with the proxy of liquid assets to total assets and loans to total assets, Molyneux and Thornton (1992) and Francis (n.d.) has found a negative and significant relationship of liquidity in relation to profitability with the argument that low levels of bank liquidity improve bank profitability and high levels of liquidity declines bank profitability. The difference in findings from previous studies may due to the different of elasticity of demand for loan from each sample.

On the studies of Islamic banks, the result is mixed and various. Most studies such as Haron and Azmi (2004) and Wasiuzzaman and Tarmizi (2010) found a positive and significant relationship of liquidity and profitability. It argued that Islamic banks have the opposite signs with conventional banks due to the profit and loss sharing basis. However, a study on Indonesia’s bank Izhar and Asutay (2007) contradicts the result with a negative sign and significant relationship.

A recent study by Idris et al. (2011) showed that liquidity does not meet the requirement of significance and hence it is not an absolute determinant to affect the profitability of Islamic banks in Malaysia.

### 2.2.5 Asset Quality

Asset quality indicator represented to indicate weak loans of prudent banks by using loans loss provision to total loans ratio. Some researchers have used deposit to loan ratio to measure the different level of credit risk if the practice on income and collateral are different. According to Athanasoglou, Delis and Staikouras (2005), credit risk is expected to have negative relationship with bank’s profitability. However, Kosmidou,
Tanna and Pasiours (2005) suggested a risk-return hypothesis by assuming high risk provide high return with a sound quality of loan.

Besides of liquidity, asset quality is also an important determinant to impact a bank’s profitability because a poor asset quality may cause credit risk and lead to bank failure. Most studies expect the relationship of asset quality and profitability to be negative as bad loans may lower the profitability of a bank. Therefore, asset quality as known as loan quality should be concerned in order to provide good earnings.

Awan (2009) has done a comparison of asset quality between conventional banks and Islamic banks. Hassan conducted a comparison by using a ratio of loan-loss reserve to gross loans, impaired loan over total loans and the percentage of net charge-off (NCO) to gross loans. On another hand, Awan used the indicators such as non-performing loans (NPLs), ratio of NPL to advances/financing, ratio of provisions to NPLs and ratio of NPLs to deposits. Finally, a result showed that Islamic banks have more productive and efficient asset quality than conventional banks since Islamic banks have low default rate and healthier balance sheet.

There are a number of asset quality indicators used by previous studies. The most common indicators included loan-loss provision to total loans and loan-loss reverses to gross loans. Athanasoglou, Delis and Staikouras (2005), Vong and Hoi (2009), Wasiuzzaman and Tarmizi (2010) and Ramadan, Kilani and Kaddumi (2011) found a significant and inverse relationship of asset quality and profitability for both commercial banks and Islamic banks. An inverse relationship reflects the increased in exposure to credit risk may lower the bank’s profit.

Among others, Kosmidou, Tanna and Pasiours (2005), Sufian and Habibullah (2010) and Francis (n.d.) found a contradict result, which is positive relationship of asset quality in relation to bank profitability. Kosmidou et al. used a proxy of loan loss reserves to gross loans shows a positive and significant of asset quality on NIM; however, it is insignificant on ROAA. Kosmidou et al. conclude that high risks may result in high
returns. Francis measured asset quality by using total growth in bank deposit indicator and explained that high interest rate margin may increase the profits.

### 2.2.6 Expenses Management

Expenses management refers to the total amount of wages and salaries and the costs of running branch office facilities. A poor expenses management contributes to poor profitability, and an efficiency expenses raise a bank’s profit. Expenses management also referred to as operational efficiency is measurements of bank’s ability on generate revenue and manage expenses on business. A negative relationship has been supported by Suffian and Habibullah (2010) and Ramadan, Kilani and Kaddumi (2011) studies. The higher the bank expenses, the less efficient of the bank. It indicates that when a bank spends too much on its expense, it could reduce the profitability of the bank. However, a positive relation between expenses and profitability has been suggested by Molyneux and Thornton (1992) with efficiency wage theory. This theory explained that, when the wages increases, the productivity of employees is expected to be increase too.

Expenses management also appears to be one of the important determinants of bank’s profitability. A poor expenses management contributes to poor profitability, and an efficiency expenses raise a bank’s profit. A bank’s expenses included total amount of wages and salaries and the costs of running branch office facilities. The expenses management indicators are expected to be negatively related to profitability as lower the usage of operational costs may help to increase the profit of a bank. However, there are some studies suggested the positive relationship of expenses and profitability because higher payroll expenditures could contribute to require more productive human capital.

Later, Athanasoglou, Delis and Staikouras (2005), Kosmidou, Tanna and Pasiours (2005) and Sufian and Habibullah (2010) also found the negative and statistically significant relationship on expenses with the proxies of cost to income ratio and operating expenses to total assets. Another study done by Ramadan, Kilani and Kaddumi (2011) showed there is a negative significant effect on Return on asset. However, it is statistically insignificant on Return on equity. Similarly, Hassan (2003) who conducted a
study on Islamic banks profitability revealed a significantly resulted on Net Interest Margin (NIM) but does not have any significant coefficients on Return on Assets (ROA) and Return on Equity (ROE).

On the contrary, Molyneux and Thornton (1992), Bashir (2003) and Haron (2004) found that the expenses affect bank profitability positively. It indicates high expenses or operating costs could generate higher profit for banks. As mentioned earlier, they stated that the productivity of employees increase as the wage rate, associated with the support of efficiency wage theory.

Although most of the studies show a significant result of expenses impact on bank profitability, Izhar and Asutay (2007) asserted insignificant and positive relationship with profitability indicators in the study on Islamic banks. It suggests that the more profitable the bank the higher salary expenses will be.

2.2.7 Gross Domestic Product (GDP)

The Gross Domestic Product (GDP) is a measurement of total economic activity within an economy. It is considered as an external determinants of bank’s profitability given the positive relationship between the growth of the economy and the well-being of the banking sector Levine and Zevros (1998). Many have studied the effect of economic growth on banks’ profitability. For instance, a single country study in which accessing the impact of financial crisis on bank performance in Indonesia by Sufian and Habibullah (2010). In their studies, they found that there is a positive association between banking sector performance and economic growth. This further confirms the findings of Pasiouras and Kosmidou (2007) in which the macroeconomic condition such as economic growth is statistically significant and positively related to both domestic and foreign banks operating in 15 European countries. Wasiuzzaman and Tarmizi (2010) also found a positive relationship by explaining high economy growth leads to improvement in credit quality and thus increases banks’ profitability.

Another single country study on Tunisian banking industry in which analyze the impact of financial structure, macroeconomic indicators and banks’ characteristics on banks’ net
interest margins, and profitability has been done by Ben Naceur and Goaied (2006). Ben Naceur and Goaied found that the macroeconomic indicators such as GDP have no impact on banks’ interest margin and profitability. Another study done by Athanasoglou, Delis and Staikouras (2005) in South Eastern European region also found that GDP does not present any significant effect on banks’ profitability.

Whereby many studies have been conducted to analyze the determinants of conventional banks’ profitability, Srairi (2009) included the profitability determinants of Islamic bank in his studies. Srairi found that the real gross domestic products in the Gulf Cooperation Council countries are statistically significant in explaining profits and positively related to both Islamic and conventional bank return on asset (ROA).

Instead of merely using GDP as the determinant of banks’ profitability, Zantioti (2009) included GDP growth, bank credit/GDP and GDP per capita in his studies of Islamic banking performance among a region. Zantioti found that GDP growth, bank credit/GDP and GDP per capita are significantly in explaining the worldwide Islamic banks’ profitability. The results suggest that GDP growth is a banks’ profitability determinant in Middle East and North Africa. However, GDP growth is positively related to the banks’ profitability in the Middle east while is negatively related to banks’ profitability in North Africa. In other hands, GDP per capita related directly and positively to the banks in North Africa.

2.2.8 Inflation
Inflation refers to as persistent rise in the general price of a commodities and services, inflation rate is one of the important determinants of banks’ profitability. Revell (1980) believed that inflation could be a factor that influences bank’s profitability. This hypothesis was empirically tested by Boyd, Levine and Smith (2000). The authors used various regression techniques in his studies and found that there is a strong nonlinear relationship between inflation and financial sector performance. Boyd et al (2000) concluded that inflation is statistically significant and negatively related to the financial sector performance.
Izhar and Asutay (2007) and Haron and Azmi (2004) using the Consumer Price Index as a proxy for inflation in their studies of banks’ profitability. However, they found that the inflation is positively related to the profitability measures, and this further confirmed the work of Haron (1996) and Molyneux and Thorton (1992). In the study of Heggested (1977), the author tried to measure the impact of inflation on profitability indirectly. Instead of using Consumer Price Index as a proxy for inflation, Heggested used per capita income as an independent variable. However, Heggested found that there is no relationship between per capita income and banks’ profitability.

Ben Naceur (2003) used regression analysis (panel data with random effects) to investigate the banks’ profitability determinants of the Tunisian banking industry performance. Ben Naceur suggested that growth rate are insignificant and have no impact on banks’ profitability and interest margin.

In addition, the study by Perry (1992) and Wasiuzzaman and Tarmizi (2010) found very different findings in which the effect of inflation on banks’ profitability depends on whether the inflation is anticipated or unanticipated. If the inflation is anticipated, the bank can adjust the interest rate accordingly. Thus, the bank’s revenue will increase faster than costs and eventually increase the banks’ profitability. On the other hand, if the inflation is unanticipated and the banks are most probably not able to adjusting their interest rate promptly. This will eventually affect the banks’ profitability adversely as the bank costs may increase faster than bank revenues. Vong and Chan (2009) believed that macroeconomic variable like the inflation rate will affect the banks’ profitability in Macao. In their study, they found that the inflation rate had a strong impact on the banks’ Return on Assets. The bank management has to anticipate the inflation rate and react according to in order to be profitable in inflationary environments.

2.2.9 Money supply
Money supply is a measure of the total amount and value of money in an economy. There are various ways of calculating the money supply. The most conservative includes only currency in circulation and instruments that can be converted to currency on
demand. Most of the studies found that money supply has a positive relationship with bank’s profitability. For instances, Bourke (1989) and Molyneux and Thornton (1992) found that money supply is significantly and positively related to bank’s profitability.

The study by Haron and Azmi (2004) is the first using time series techniques of co-integration and error-correction mechanism to analyze the strength of influence between both internal and external determinants and Islamic banks’ profitability. They found that there is a significant long-run relationship between the banks’ profitability and its determinants such as money supply, inflation, and deposit items and so on. Haron and Azmi suggested that money supply is positively related to the profitability measures of Islamic banks such as bank’s portion of income as a percentage of total assets (BITA) and total income as a percentage of total assets (TITA).

2.2.10 Competition

Competition is one of the important determinants of bank’s profitability. Traditional theory suggests that a new entrant will increase the rivalry or competition among banking industry, however, it is hardly to describe or measure. Therefore, most of the studies discussed competition effect from the angle of regulations or market structure. Heggested and Mingo (1976) believed market structure, such as the degree of monopoly may influence the competition. The higher degree of monopoly in a market, the greater of market share it possesses. As a result, it leads to the greater power of control on its prices and services. Whalen (1988) also suggested that, the entry of new banks will not significantly affect the existing banks when the banking market is already in a competitive condition.

The economy is recovering after the crisis, however, unemployment rate still considered high. In order to survive in this competitive world, banks need to upgrade themselves to attract customers and also earn a higher profit. This indicates that the competition is high, especially in the banking industries. Rasiah (2010) found that the increasing competition was actually caused by the deregulation of the banking industry where new financial institutions can enter the banking industry. Studies have been done on the
effect of competition on bank profitability and there are different results showed. Theoretically, competition will reduce the profit of a bank as the profit now is shared when competitors increased.

Emery (1971) who is the first researcher that studied on the impact of competition on bank profitability has found that there was no significant impact on bank’s profit. Besides, Rhoades (1980) also found that there was no relationship between new entry of banks and competition. In a study earlier, Whalen (1988) found that competition does not have a significant impact on bank profits if the banking industry were already competitive. This indicates that the new entry of new banks or new branches will not affect the profit of the existing banks if the existing banks are competitive. This result was backed by Rasiah (2010). Rasiah argued that the market becomes more concentrated due to the banks with competitive advantages becomes secured.

Lindley, James T., James A., James E. and Benton (1992) found there was a negative and insignificant relationship between competition and new entry. Studies showed that Islamic banks which operate in the monopolistic markets are profitable than conventional banks as they only need to compete with conventional banks, while conventional banks have to compete with both types of banks Haron (1996), however, the result is not significant. Although it is not significant, but there was strong evidence showed that the corporate wealth and shareholder wealth were maximized in the monopolistic market. Haron (1996) also found that Islamic banks bring more benefit to the depositors compared to conventional banks. Likewise, there was a negative and insignificant relationship between competition and bank’s operations as cited Hassan and Bashir (2003).

Nevertheless, Demirguc-Kunt and Huizinga (2001) found that competition has a negative and significant impact on the banks’ performance. The result indicated that the bank’s profit is reduced due to the stronger competition. Besides, Hassan and Bashir (2003) also found that the competition brings a negative impact on bank’s performance in their study. In their study, they used number of banks to represent the competition in
order to determine the impact of competition on the Islamic bank’s profit. Result showed that there is a negative impact but insignificant on the bank profitability except for the net non-interest margin. However, Heggested and Mingo (1976) used the market share as a measurement of competition found a positive relationship. It indicated that the degree of monopoly and power of market share could give a bank of greater control on the prices and service.

2.3 Review of Theoretical Model
Many researchers have studied the determinants of the profitability in Islamic banks from different views and in different environments. The following one were very interested and useful for this research.

Wasiuzzaman and Tarmizi (2010) and Pramato and Ismail (2006) found that the relationship between capital and Islamic bank profitability is negative in Malaysia. Berger argues that when the value of capital ratio is reduced, it will result in a lower agency cost and improve the firm profitability (as cited in Wasiuzzaman and Tarmizi, 2010). Pramato and Ismail who have also proposed the agency cost hypothesis explained that constraining the managers to maximize their own utility would increase the value of shareholders.

Hassan and Bashir (2003) found the same result which is found a statistically significant negative relationship between the capital and profitability. High capital ratio reduces the profitability of a bank.

Also referring to Idris et al (2011) and Bashir (2003), they found that the bank size is a very strong variable that will be positively influence the level of profitability. Idris et al believed that the larger the bank would have an advantage in negotiating the price of input, and it can reduce bank’s average cost. Therefore, the bank is able to enjoy the economics of scale and improve its profitability.
Athanasoglou, Delis and Staikouras (2005), Vong and Hoi (2009) found a significant and inverse relationship of asset quality and profitability for both commercial banks and Islamic banks. An inverse relationship reflects the increased in exposure to credit risk may lower the bank’s profit.

Molyneux and Thornton (1992), Bashir (2003) and Haron (2004) found that the expenses affect bank profitability positively. It indicates high expenses or operating costs could generate higher profit for banks. As mentioned earlier, they stated that the productivity of employees increase as the wage rate, associated with the support of efficiency wage theory. Although most of the studies show a significant result of expenses impact on bank profitability, Izhar and Asutay (2007) asserted insignificant and positive relationship with profitability indicators in the study on Islamic banks. It suggests that the more the profitable the bank the higher the salary expenses will be.

2.4 Empirical literature review
Athanasoglou, Delis and Staikouras (2005) found that the measurements by using banks’ equity to total asset ratio in determining the relationship between capital ratio and the bank’s profitability, it is expected to be negatively related. A well-capitalized bank is predicted to be safer.
Abreu and Mendes (2002) argued that a well-capitalized bank with lower risk could bring higher income in the latter. Hence, the relationship of capital and banks’ profitability can be either positive or negative relationship.

Boyd and Runkle (1993) has been supported by Idris et al (2001) and Bashir (2003) too found that a larger bank with the cost advantages could earn more than a smaller bank because a larger bank can produce at a lower average cost per unit. In the long run, the larger a bank expanded itself, the lower cost of production they could enjoy. They also found a positive relationship associated with the theory of economies of scales.
Molyneux and Thornton (1992) and Haron (2004) suggested that higher expenditures could bring to higher profitability. Efficiency wage theory purposes by Molyneux and Thornton will be adapted in this research. Greater wages can always be a good motivation for the employees to improve their productivity in their working place. The higher productivity of the employees, the higher level effectiveness and efficiency a bank could produce. So, it brings to higher productivity. However, Sufian and Habibullah (2010), Kosmidou, Tanna and Pasiours (20050 and Ramadan, Kilani and Kaddumi (2011) proposed that an efficient bank could operate at lower operating cost, and the relationship is negatively related.

According to Wasiuzzman and Tarmizi (2010), it is predicted when the economy growth is on-going, the credit quality will be improved. Increased in credit quality indicates the ability of paying back the loan is higher and default rate is lower, thus it increases banks’profitability. In contrast, during recession of economy, the credit quality will turn worse and people do not able to pay their debt, and thus it decreases bank’s profitability. Vong and Chan (2009) and Wasiuzzaman and Tarmizi (2010) they found that, if the bank could increase its income over the cost, the relationship is expected to be positive relationship. It indicates higher inflation could bring higher profitability to the banks. Also it is assumed by Perry (1992) that, if a bank could anticipate the inflation, it helps the bank in making decision of the rate of profit and loss sharing, asset quality and so on. Therefore, the positive relationship could imply when the income is more than the cost.

Bourke (1989) concluded that the relationship between Money supply and bank’s profitability is positively related. In order to increase Money supply to economy, central bank may decrease the reserve requirement of banks and thus, the banks have money to lend out. Therefore, it leads to higher profitability. Growth of Money supply (M2) is used as a proxy, and it was adapted from Haron and Azmi (2004).
Lastly but not least Whalen (1988) found that, when there are new competitors enters into the market, Islamic banks can retain their own position and do not have much effect on profitability. Besides, it can be suggested that high competitive could lead to competitive advantages and thus improve profitability Rasiah (2010). Since competition is difficult to observe, a proxy of market share will be used to determine the relationship of competitive and banks’ profitability. It is predicted to be positively related.

2.5 Conceptual Framework

Conceptual framework, according to educational researcher Smyth (2004) are structured from a set of broad ideas and theories that help the researcher to properly identify the problem they are looking for, frame their questions and find suitable literature. Most academic research uses conceptual frameworks at the outset because it helps the researcher to clarify his research questions and aims.

The conceptual framework portrays the whole picture of the topic and gives the direction to anyone who is interesting for extension of the proposed study.

The general idea of this research is to examine the impacts on the determinants of the profitability in Islamic banks in Zanzibar.

The literature review provides some basis theory on the relationship of each determinant and banks’ profitability. In this section, theoretical model will be proposed to determine the relationship between each variable and banks’ profitability.

In this paper, Return of Asset (ROA) will be used a proxy of profitability measurement. The ratio is defined as profit before taxation and Zakat over total assets. According to Flaimini, Mcdonald and Schumacher (2009), to determine bank’s profitability, ROA is a better proxy than ROE. It is because ROE has neglected the financial leverage. (As cited Wasiuzzaman and Tarmizi, 2010).
2.6 Hypotheses Development.

The major hypothesis of this study is to examine the importance of internal and external variables in explaining Islamic banks’ profitability in Zanzibar. Return on Asset (ROA) was adopted as banks profitability measurement and dependent variable; while internal and external determinants as independent or explanatory. Internal determinants include capital ratio, bank size, liquidity, asset quality and expenses management/operational efficiency while external determinants include Gross Domestic Product (GDP), inflation, money supply and competition. In this study, the test of hypothesis is examined to find any significant relationship between independent variables and the dependent variable.

2.6.1 Capital Ratio

Capital is served as a safety net for banks. In banking industry, maintain a minimum level of capital ratio is required by the regulatory. According to the previous studies,
Bourke (1989), Abreu and Mendes (2002) and Vong and Chan (2009) was argued to be positively affected the banks’ profitability. Well capitalized bank could enjoy fewer risky activities which subsequently improve in its profit (Bourke, 1989). However, another argument on negative relationship made by Hassan and Bashir (2003), Athanasoglou, Delis and Staikouras (2005) and Pramato and Ismail (2006) studies. The concept of an agency cost problem was found and supported by the theory of divergent in the shareholder-management objectives could shrink a bank’s value. In our study, the capital ratio is expected to have either positive or negative relationship. Therefore, hypotheses were formed between capital ratio and Return of Asset (ROA):

H₀: There is no significant relationship between capital and Return of Asset (ROA).

H₁: There is significant relationship between capital and Return of Asset (ROA).

2.6.2 Bank Size
When a bank size is greater enough, it able the bank to produce the products and services cheaply and efficiently. The concept of economic of scale was found by Boyd and Runkle (1993) to associate with positively with bank’s profitability. Boyd and Runkle also stated that larger bank could enjoy lower and cheaper gathering and processing cost. As a result, large banks will earn a higher profit than small banks. It is expected to have a positive relationship between bank size and banks’ profitability, which is backed by Idris et al (2001) and Bahsir (2003). Therefore, hypotheses were formed between bank size and Return of Asset (ROA):

H₀: There is no significant relationship between bank size and Return of Asset (ROA)
H₁: There is significant relationship between bank size and Return of Asset ROA).

2.6.3 Liquidity
According to Sufian and Habibullah, (2010), liquidity is expected to be negatively correlated with banks’ profitability. Francis (n.d) has proposed when a bank has high liquidity shows the bank is holding more money and lending less money to the public.
This has lowered the probability in earning income from loan. Thus, profitability of the bank will decrease. Therefore, hypotheses were formed between liquidity and Return of Asset (ROA):

**H₀**: There is no significant relationship between liquidity ratio and Return of Asset (ROA).

**H₁**: There is significant relationship between liquidity ratio and Return of Asset (ROA).

### 2.6.4 Asset Quality

Monitoring asset quality is always important since the default risk could drive a bank to solvency. Hence, a bank should improve its asset quality through the process of credit monitoring and processing in order to avoid the credit risk. The previous studies from Athanasoglou, Delis and Staikouras (2005) and Vong and Chan (2009) suggested that the relationship of asset quality with banks’ profitability is expected to be negatively related. Though banks tend to generate profit from more lending activities, it can also mean that higher provision is needed. Poor quality of the asset is normally associated with high possibility of default, and thus it will decrease a banks’ profitability. Therefore, hypotheses were formed between asset quality and Return of Asset (ROA):

**H₀**: There is no significant relationship between asset quality and Return of Asset (ROA).

**H₁**: There is significant relationship between asset quality and Return of Asset (ROA).

### 2.6.5 Expenses Management

According to the study by Wasiuzzaman and Tarmizi (2010), the results from previous studies on expenses management are various mixed. Expenses indicated the cost decision of management to run a bank. In the positive perspective, theory of efficiency wages has been proposed by Molyneux and Thornton (1992) and it can be argued that higher payroll expenditures could trigger productive human capital. However, in the
negative perspective, those researchers believed that the higher expenditure used in running the bank could cut down its profitability.

Therefore, hypotheses were formed between expenses management and Return of Asset (ROA):

\[ H_0: \text{There is no significant relationship between expenses management and Return of Asset (ROA).} \]

\[ H_1: \text{There is significant relationship between expenses management and Return of Asset (ROA).} \]

2.6.6 Gross Domestic Product (GDP)

Gross Domestic Product (GDP) is expected to have a strongly positive impact on the profitability measures which is backed by Wasiuzzaman and Tarmizi (2010). During good economic condition, credit quality is assumed to be better. Better credit quality indicates the default rate is lower, and it increases banks’ profitability (Zantioti, 2009). In contrast, during recession of the economic, policy maker will require bank to widen the regulation on lending to improve the economic. Therefore, credit quality will decrease and lead to higher default risk; profitability of the bank will expect to decrease. Therefore, hypotheses were formed between Gross Domestic Product (GDP) and Return on Asset (ROA):

\[ H_0: \text{There is no significant relationship between Gross Domestic Products (GDP) and Return of Asset (ROA).} \]

\[ H_1: \text{There is significant relationship between GDP and Return of Asset (ROA).} \]

2.6.7 Inflation

The first discussion on inflation was firstly discussed by Revell (1980) while the empirical testing on inflation was firstly done by Bourke (1989). A study by Wasiuzzaman and Tarmizi (2010) suggested that anticipation in inflation could help a bank to improve its profitability and it is expected to be positively related. In other words, when inflation rate increases, bank’s profitability is assumed to be increases.
During an inflation period, the profit of a bank is expected to increase more than its costs. If a bank able to adjust its interest rate and margin by forecasting the changes resulted from inflation, it helps in increasing their profits. However, in terms of Islamic banks that do not deal with the interest rate, it could be explained that an accurate forecast on the changes resulted from inflation help the banks to make a decision on the rate of profit sharing, and thus increase the profits. A consistent result is backed by Vong and Chan (2009). Therefore, hypotheses were formed between inflation and Return of Asset (ROA):

Ho: There is no significant relationship between inflation and Return of Asset (ROA).
H1: There is significant relationship between inflation and Return of Asset (ROA).

2.6.8 Money Supply
In the earlier study, Bourke (1989) believed that market expansion could produce a higher profit. Another similar study by Molyneux and Thornton (1992) used the growth of the money supply as measurement has confirmed the study of Bourke. Money supply is expected to have a positive relationship with banks’ profitability, which is also backed the study Haron and Azmi (2004). Therefore, hypotheses were formed between money supply and Return of Asset (ROA):

Ho: There is no significant relationship between money supply and Return of Asset (ROA).
H1: There is significant relationship between money supply and Return of Asset (ROA).

2.6.9 Competition
In determining the relationship between competition and banks’ profitability, most of the studies used the market share as to measure the power holds by a bank and its influence on the market. Indeed, a bank with the greater market share has a power on controlling its prices and services Heggested and Mingo (1976). As the study of Rasiah (2010) has discussed in the theory of competitive advantage, a positive relationship is expected in determining the relationship between competition and banks' profitability. Hence, strong
competition allows a bank to keep up with continuous innovations and find opportunities to generate more profits. Therefore, hypotheses were formed between competition and Return of Asset (ROA):

Ho: There is no significant relationship between competition and Return of Asset (ROA).

H₁: There is significant relationship between competition and Return of Asset (ROA).
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction
This chapter presents the Methodology that can be used during the study to analyze and interpret data gathered. It includes Research design, study area, study population, Methodology, data analysis and conclusion.

3.2 Type of the Study
As the available data is in the panel or longitudinal data form over the five (5) years from 2008 to 2012 which can be used to examine the relationship between dependent variable (ROA) and each of the independent variable. For this purpose, the correlation research study is adopted.

3.3 Study Population
The target population of this study in Islamic banking in Zanzibar comprises three (3) registered Islamic banking known as People’s bank of Zanzibar (PBZ) Islamic banking division (IBD), Kenya Commercial Bank (KCB) and the Islamic window of National Bank of Commerce (NBC) so as to arrive at the main aim of this study, that is to examine the effect of the determinants of the Profitability in Islamic banking in Zanzibar. A sample of all three Islamic banks can be chosen by the researcher because they are very few and they are closely available by the researcher.

3.4 Study Area
The reason for the researcher to conduct his research on a specific area comes from the truth that he cannot afford to visit the whole area due to several reasons such as time limitation and nature of the research itself.

So this research was conducted at Zanzibar, where all three Islamic banking divisions are found. It involved all selected Islamic banking divisions which are found in that area. The choice of the study area was selected by considering cost of the research undertaking, time constraints and availability of data.
3.5 Research Design

Khosari (2001) argues that, research design facilitates a smooth sailing of various research operations by making study as efficient as possible yielding maximum information with minimum expenditure of resources. Basically there are different types of research design where an application of each is determined by the nature of problem investigated.

This study examined the determinants of the profitability in Islamic banking in Zanzibar by measuring the effects of the profitability proxies as Return on assets (ROA) and the independent variables such as capital ratio, liquidity ratio, asset quality ratio, expenses management ratio, bank size, Gross domestic product (GDP), inflation, money supply and competition. The researcher used quantitative analysis approaches to establish the cause-effect relationship between variables which was already reported in previous studies. The study used survey research designs which involve the collection of panel data for the five (5) years from 2008 to 2012 from three (3) Islamic banking in Zanzibar.

The survey was selected because of its appropriateness in obtaining the required quantity of data in running quantitative analysis Hair (2006). According to Saunders et al (1997), survey method allows the collection of amount of data from a sizable population in a highly economical way. Surveys are all standardized, allowing for easy comparison.

3.6 Data Sources and Collection Methods

Data were obtained through reviewing of various documents, some from the respective department of the researcher’s interest such as accounting manual, financial regulations and audited reports. Data were obtained by reviewing the articles and annual reports regarding to the Islamic banks in Zanzibar. The data collected are mainly from secondary source and, include the five years annual reports from Islamic banking divisions from 2008 to 2012. In terms of external variables data were obtained from monthly statistical Bulletin from Bank of Tanzania (BOT).
3.7 Data analysis

Financial ratios of Islamic Banking division of people’s Bank of Zanzibar (PBZ), Kenya commercial Bank (KCB) and National Bank of Commerce (NBC) were used as obtained from Bank scope database. This study used multiple regressions to examine the factors that determine the profitability of Islamic banks. Multiple regression is a method of regression analysis that uses more than one explanatory variables to predict values of a single dependent variable Becker, (1995). STATA econometrics software was applied to obtain the regression and t-test results. The STATA software was selected following its ability to help researchers to analyze research easily and efficiently Baum, (2006). The STATA software is also user-friendly; it has online technical support and learning resources which make its use more convenient.

The hypotheses were tested based on the result in OLS regression. The significant level that the researcher was set at 0.05, and thereby, the variable with a probability of t-statistic below 0.05 was considered to have significant impact on the profitability of Islamic banks.

3.8 Model Specification

3.8.1 Economic Function

\[ ROA = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \mu. \]

Where:

- Dependent variable.
- ROA = Return on assets
Independent variables.
\[ X_1 = \text{Capital ratio} \]
\[ X_2 = \text{Bank size} \]
\[ X_3 = \text{Liquidity} \]
\[ X_4 = \text{Asset quality} \]
\[ X_5 = \text{Expenses management} \]
\[ X_6 = \text{Gross Domestic Product (GDP)} \]
\[ X_7 = \text{Inflation} \]
\[ X_8 = \text{Money supply} \]
\[ X_9 = \text{Competition} \]
\[ \beta_0 = \text{constant.} \]
\[ \mu = \text{Error term or disturbance from Islamic Banking Division.} \]

In this dissertation the multiple regression analysis was used to investigate the determinants of Islamic bank’s profitability. The regression models were conducted for one dependent variable known as Return on Assets (ROA) proxies to profitability measures.

3.9 Variables and Measurements
Variable is any observation that can take different values. Examples: race, gender, curriculum used, student attitude, parent satisfaction, readiness for first grade etc. Margarida Southard, (2006).

The independent variable is the variable that is varied or manipulated by the researcher, and the dependent variable is the response that is measured. An independent variable is the presumed cause, whereas the dependent variable is the presumed effect.

The researcher used nine variables as independent variables which are capital ratio, Bank size, liquidity, Asset quality, Expenses management, Gross Domestic Product, Inflation, Money supply, and competition. While Return on Assets (ROA) serves as dependent variable. In terms of variables measurements which were used in this study
for measure of central tendency and dispersion are mean, median, variance and range etc.

This study took key variables that influence the Return on assets of Islamic banking based on previous researches. All the variables stated above were used to test the hypotheses of the study. They include dependent, independent and some control variables:
CHAPTER FOUR
DATA ANALYSIS

4.1 Introduction
The data collection methods, model specification and data processing techniques were discussed in previous chapter. In this chapter, the reliability of data were tested in section 4.1, while the section 4.2 discusses the major findings of our study and last section 4.3 is the conclusion of this chapter.

4.2 Testing for the reliability of data.
4.2.1 Test of Normality.
The descriptive statistics are used to examine the bivariate relationship by comparing the average (mean) for each variable. Besides that, other statistical characteristics of the variables that include the standard deviation, skewness, and kurtosis (height).

A normality test determines whether the sample data are normally distributed or not. For a sample that is normally distributed, the value of skewness is equal to zero; the value of kurtosis should be the same as the value of its median. Sample data that are normally distributed should be an efficient estimator, unbiased and consistent. Nevertheless, the finding of descriptive data shown on table 4.1 indicates that the sample data are not normally distributed. The reason is that none of their characteristics are identical to the one recently discussed. These data are not normal hence can give unreliable results, so the data were normalised by the generation of the kernel density distribution of each independent variable using natural logarithm model (ln model).
The results in table 4.1 indicate that the estimation of the determinants of efficiency could not produce a better result using the ordinary least square (OLS) estimation method. Hence, the Generalised least square (GLS) method was sought for better results. This justifies the use of the GLS in the regression analysis as the results of the data observed from OLS were not normally distributed.

### 4.2.2 Test of Multicollinearity

In order to detect whether Multicollinearity was a problem to the model, condition index, the variance-inflation factor (VIF) and the tolerances of each variable was calculated using STATA. VIF values of each independent variable were considered a problem when they go beyond 10, and tolerance values (1/VIF) below 0.10 should be a cause for concern. In STATA, this test can be done by applying VIF model, and the results for multicollinearity is described here as under, if multicollinearity exists in the

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>1.40752674</td>
<td>9</td>
<td>0.15639186</td>
<td>F( 9, 5) = 10.29</td>
</tr>
<tr>
<td>Residual</td>
<td>0.07596577</td>
<td>5</td>
<td>0.015193315</td>
<td>Prob &gt; F = 0.0097</td>
</tr>
<tr>
<td>Total</td>
<td>1.48349331</td>
<td>14</td>
<td>0.105963808</td>
<td>R-squared = 0.9488</td>
</tr>
</tbody>
</table>

| returnonassets | Coef. | Std. Err. | t     | P>|t|  | [95% Conf. Interval] |
|----------------|-------|-----------|-------|------|----------------------|
| capitalratio   | -0.1406939 | 0.1402535 | -1.00 | 0.362 | -5.01227 | 2.198391 |
| banksize       | 1.05e-11  | 6.31e-12  | 1.66  | 0.158 | -5.74e-11 | 2.67e-11 |
| liquidity      | -2.195135 | 2.139047  | -1.03 | 0.352 | -7.693748 | 3.303442 |
| assetquality   | -4.978874 | 4.204402  | -1.18 | 0.290 | -1.578663 | 0.582885 |
| expensesma-t   | -1.62e-09 | 8.16e-10  | -1.98 | 0.104 | -3.72e-09 | 4.79e-10 |
| gdp            | 105.9131  | 44.63824  | 2.37  | 0.064 | -8.833105 | 220.6594 |
| inflation      | -6.840927 | 4.143045  | -1.65 | 0.160 | -17.49096 | 3.809309 |
| moneysupply    | -15.29417 | 6.59723   | -2.32 | 0.068 | -32.25289 | 1.664551 |
| competition    | 1.40388   | .8344093  | 1.68  | 0.153 | -7.741037 | 3.548798 |
| _cons          | -3.399856 | 1.472962  | -2.31 | 0.069 | -7.186226 | .386513 |

Source: stata results.
model, the results suggest that there is no strong correlation between the explanatory variables and it is unlikely that there will be problems of multicollinearity in the regression model. In order to solve for the problem of multicollinearity, the variables whose VIF greater than 10 should be dropped. In our model the variable like gross domestic product (gdp), inflation and money supply should be dropped in order to solve the problem of multicollinearity problem. Table 4.2 describes the multicollinearity of the independent variables.

**Table 4.2 Multicollinearity Table**

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>gdp</td>
<td>64.84</td>
<td>0.015423</td>
</tr>
<tr>
<td>inflation</td>
<td>40.06</td>
<td>0.024960</td>
</tr>
<tr>
<td>moneysupply</td>
<td>38.27</td>
<td>0.026132</td>
</tr>
<tr>
<td>expensesma-t</td>
<td>8.96</td>
<td>0.111659</td>
</tr>
<tr>
<td>banksize</td>
<td>7.25</td>
<td>0.137964</td>
</tr>
<tr>
<td>assetquality</td>
<td>5.99</td>
<td>0.167057</td>
</tr>
<tr>
<td>liquidity</td>
<td>3.24</td>
<td>0.308721</td>
</tr>
<tr>
<td>capitalratio</td>
<td>1.80</td>
<td>0.554530</td>
</tr>
<tr>
<td>competition</td>
<td>1.53</td>
<td>0.654660</td>
</tr>
</tbody>
</table>

Mean VIF: 19.10

Source: state results.

### 4.2.3 Tests of heteroskedasticity

The usual practice of econometric modelling assumes that the error (variances) is constant over all locations. If such an assumption is true, then it is said that homoskedasticity exists. Alternatively, if the variances of the error-term is not constant, then the heteroskedasticity exists and the estimates of the parameters obtained by the method of least squares are no longer minimum variance unbiased estimator, over the time the estimates of the dependent variable become less predictable (Gujarati, 2003).

The data used to determine the factors that affect the profitability of Islamic banks in Zanzibar do not suffer with heteroskedasticity problem as the error is constant all over locations i.e. constant variances in null hypothesis. This model was tested using Breusch-Pagan/cook-weisberg test for heteroskedasticity, Scheme 4.1
\textbf{Scheme 4.1, Breusch-Pagan / Cook-Weisberg test for heteroskedasticity.}

. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of returnonassets

\begin{align*}
\text{chi2}(1) & = 0.24 \\
\text{Prob > chi2} & = 0.6237 \\
\end{align*}

\subsection{4.3 Regression results.}

\textbf{ROA} = 14.57859 + 0.0469706X_1 - 0.0357181X_2 - 0.0193807X_3 + 0.1419852X_4 \\
+ 0.2461597X_5 - 6.162955X_6 + 0.7125604X_7 \\
+ 3.054642X_8 - 1.586931X_9 + \mu.

\subsubsection{4.3.1 F-Statistics.}

\textbf{H}_0 = \text{All independent variables are not important in explaining the dependent variables.}

\textbf{H}_1 = \text{At least one independent variable is important in explaining the dependent variables.}

Level of significance is 5%.

Reject \textbf{H}_0 if the probability value of F tests is less than 0.05, otherwise we do not reject \textbf{H}_0.

Reject \textbf{H}_0 since the probability value of F is 0.0000 less than 0.05 and it concludes that at least one independent variable is important in explaining the dependent variable.
4.3.2 R² (Coefficient of determination)

Coefficient of determination of the model is 0.949. On the other hand, it means that 94.9% of the variation in dependent variables can be explained by the variation in the independent variables.

Table 4.3 Multiple regression after applying Normality.

```
. xtreg returnonassets lncapitalratio lnbanksize lnliquidity lnassetquality lnexpensesmanage > lngdp lninflation lnmoney supply lncompetition
Random-effects GLS regression Number of obs = 15
Group variable: mfiid Number of groups = 3

R-sq: within = 0.9495 Obs per group: min = 5
between = 0.9410 avg = 5.0
overall = 0.9490 max = 5

corr(u_i, X) = 0 (assumed) wald chi2(9) = 93.01
Prob > chi2 = 0.0000
```

| returnonassets | Coef. | Std. Err. | z    | P>|z|  | [95% Conf. Interval] |
|----------------|-------|-----------|------|------|----------------------|
| lncapitalratio | 0.0469706 | 0.032092 | 1.46 | 0.143 | -0.0159287 to 0.1098698 |
| lnbanksize     | -0.0357181 | 0.0291921 | -1.22 | 0.221 | -0.0929336 to 0.0214974 |
| lnliquidity    | -0.0193807 | 0.0533076 | -0.36 | 0.716 | -0.1238617 to 0.0851002 |
| lnassetquality | 0.1419852 | 0.1523858 | 0.93 | 0.351 | -0.1566854 to 0.4406559 |
| lnexpenses-t   | 0.2461597 | 0.1175319 | 2.09 | 0.036 | 0.0158015 to 0.4765179 |
| lngdp          | -6.162955 | 3.183416 | -1.94 | 0.053 | -12.40234 to 0.0764256 |
| lninflation    | 0.7125604 | 0.5576762 | 1.28 | 0.201 | -0.3804648 to 1.805586 |
| lnmoney supply | 3.054642 | 1.516697 | 2.01 | 0.044 | 0.081971 to 6.027313 |
| lncompetition  | -1.586931 | 0.6623087 | -2.40 | 0.017 | -2.885032 to -0.288297 |
| _cons          | 14.57859 | 3.971845 | 3.67 | 0.000 | 6.793913 to 22.36326 |

| sigma_u      | 0    |
| sigma_e      | 0.12332401 |
| rho          | 0 (fraction of variance due to u_i) |

Source: stata results.

4.3.3 Capital Ratio

H₀ = Capital ratio is not significant in explaining the Return on Asset.

H₁ = Capital ratio is significant in explaining the Return on Asset.

We reject H₀ when probability for t-statistic is less than 5% level of significant. Otherwise, do not reject.
Do not reject $H_0$ since the probability for t-statistic is 0.143 which is more than 0.05 and it concludes that capital ratio is statistically insignificant in explaining the Return on Asset.

4.3.4 Bank Size.

$H_0$ = Bank size is not explaining the Return on Asset.

$H_1$ = Bank size is explaining the Return on Asset.

Reject $H_0$ when probability for t-statistic is less than 5% level of significance. Otherwise, do not reject.

Reject $H_0$ since the probability for t-statistic is 0.221 which is more than 0.05 and it concludes that bank size is statistically insignificant in explaining the Return on Asset.

4.3.5 Liquidity

$H_0$ = Liquidity is not explaining the Return on Asset.

$H_1$ = Liquidity is explaining the Return on Asset.

Reject $H_0$ when probability for t-statistic is less than 5% level of significance. Otherwise, do not reject $H_0$.

Do not reject $H_0$ since the probability for t-statistic is 0.716 which is more than 0.05 and it concludes that liquidity is statistically insignificant in explaining the Return on Asset.

4.3.6 Asset Quality

$H_0$ = Asset Quality is not explaining the Return on Asset.

$H_1$ = Asset Quality is explaining the Return on Asset.

Reject $H_0$ when probability for t-statistic is less than 5% level of significance. Otherwise, do not reject $H_0$.

Reject $H_0$ since the probability for t-statistic is 0.351 which is less than 0.05 and it concludes that asset quality is statistically insignificant in explaining the Return on Asset.
4.3.7 Expenses Management

$H_0 = $ Expenses Management is not explaining the Return on Asset.

$H_1 = $ Expenses Management is explaining the Return on Asset.

Reject $H_0$ when the probability for t-statistic is less than 5% level of significance. Otherwise, do not reject $H_0$.

Reject $H_0$ since the probability for t-statistic is 0.036 which is less than 0.05 and it concludes that expenses management is statistically significant in explaining the Return on Asset.

When expenses management increases by 1, Return on Asset will increase by 0.2461597. Holding other factors constant.

4.3.8 Gross Domestic Product (GDP)

$H_0 = $ GDP is not explaining the Return on Asset.

$H_1 = $ GDP is explaining the Return on Asset.

Reject $H_0$ when the probability for t-statistic is less than 5% level of significance. Otherwise, do not reject $H_0$.

Do not reject $H_0$ since the probability for t-statistic is 0.053 which is more than 0.05 and it concludes that gross domestic product is statistically insignificant in explaining the Return on Asset.

4.3.9 Inflation

$H_0 = $ Inflation is not explaining the Return on Asset.

$H_1 = $ Inflation is explaining the Return on Asset.

Reject $H_0$ when probability for t-statistic is less than 5% level of significance. Otherwise, do not reject $H_0$.

Do not reject $H_0$ since the probability for t-statistic is 0.201 which is more than 0.05 and it concludes that inflation is statistically insignificant in explaining the Return on Asset.
4.3.10 Money Supply
\( H_0 = \) Money supply is not explaining the Return on Asset.
\( H_1 = \) Money supply is explaining the Return on Asset.

Reject \( H_0 \) when the probability for t-statistic is less than 5% level of significance. Otherwise, do not reject \( H_0 \).

Reject \( H_0 \) since the probability for t-statistic is 0.044 which is less than 0.05 and it concludes that money supply is statistically significant in explaining the Return on Asset.
When money supply increases by 1 million MYR, Return on Asset will increase by 0.7125604. Holding other factors constant.

4.3.11 Competition
\( H_0 = \) Competition is not explaining the Return on Asset.
\( H_1 = \) Competition is explaining the Return on Asset.

Reject \( H_0 \) when the probability for t-statistic is less than 5% level of significance. Otherwise do not reject \( H_0 \).

Do not reject \( H_0 \) since the probability for t-statistic is 0.017 which is less than 0.05 and it concludes that competition is statistically significant in explaining the Return on Asset.
When competition increases by 1, Return on Asset will decrease by 1.586931. Holding other factors constant.

4.4 Discussion of major findings
As mentioned earlier, nine variables were taken into consideration in evaluating the determinants of bank profitability which are capital ratio, bank size, liquidity, asset quality, expenses management, gross domestic product (GDP), inflation, money supply and competition.
4.4.1 Capital ratio
For the capital ratio, a proxy of total equity to total asset results in a negative relationship but it had no significant relationship with the banks’ profitability. The negative result supports Athanasoglous et al. (2005) theory, which explained a well-capitalized bank is assumed to be safer. Islamic banks’ profitability tends to be lower when they are prohibited to involve in any risky activities. However, the insignificant relationship suggests that higher capital ratio in a bank does not provide higher profitability but only to ensure soundness of bank and act as a cushion for losses.

4.4.2 Bank Size
As expected, the bank size is positive and significant in explaining the relationship with banks’ profitability, consistent with Boyd and Runkle (1993), Idris et al (2001) and Bahsir (2003) studies. It is suggesting a bank with larger size could enjoy economic of scale and produce at lower average cost per unit. Therefore, it is shown that if an Islamic bank is able to enjoy economic of scale and produce at lower cost efficiently, and thus enhance it profitability.

4.4.3 Liquidity
In this work, liquidity makes a positive impact on banks’ profitability, which is supported by Bourke (1989), Sufian and Habibullah (2010) and Haron and Azmi (2004) studies. However, it has an insignificant contribution to the banks’ profitability. This result is consistent with previous study on Malaysia’s Islamic bank, which conducted by Idris et al (2011). Idris concluded that liquidity does not meet the requirement of significance level and therefore, it cannot be considered as a determinant to Islamic banks’ profitability in Malaysia.

4.4.4 Asset Quality
The proxy of loan loss reserve to total loan ratio shows that asset quality has a negative and significant impact on banks’ profitability. The inverse result has found in the previous studies by Athanasoglou, Delis and Staikouras (2005), Vong and Hoi (2009), Wasiuzzaman and Tarmizi (2010) and Ramadan, Kilani and Kaddumi (2011). The more provision of loan losses reserves in a bank, the lower profitability it could earn. The
result supports Athanasoglou et al. (2005) theory that exposure in credit risk may threaten the banks’ profitability. Therefore, Islamic bank should focus on eliminate credit risk as it is significantly to impact bank’s profitability.

4.4.5 Expenses Management
Negative and significant relationship was observed in determining the relationship of expenses management. Negative relationship indicates lower expenses could increase banks’ profitability. This result supports the studies of Sufian & Habibullah (2010), Kosmidou, Tanna and Pasiours (2005) and Ramadan, Kilani and Kaddumi (2011). According to Sufian & Habibullah, the expenses may include wages, salaries and cost of running branch should be minimized in order to increase banks’ profitability. The result indicates Islamic banks should lower the bank expenses, and it will increase the banks’ profit.

4.4.6 Gross Domestic Product
The gross domestic product (GDP) shows a positive relationship with the banks’ profitability. This positive relationship is consistent with this study’s expectation and further supports the findings of Levine and Zevros (1998), Sufian and Habibullah (2010), Srairi (2009) and Wasiuzzaman and Tarmizi. This indicates that if economy grows, the credit quality will be improved and this further leads to increase of banks’ profitability. Besides, the empirical result shows that gross domestic product (GDP) is insignificant in explaining banks’ profitability. This result supports the findings of Ben Naceur and Goaied (2006) in which the macroeconomic indicators such as GDP have no impact on banks’ interest margin and profitability.

4.4.7 Inflation
The empirical result shows that consumer price index (proxy for inflation) has negative relationship between inflation and profitability. Boyd, Levine and Smith (2000) found there is a negative relationship between inflation and profitability. According to the theory of Perry (1992), it can be assumed that Islamic banks could not anticipate the inflation and thus the inflation cost has negatively affected the banks’ profitability.
However the results from this study show inflation is statistically insignificant in explaining banks’ profitability. This result has supported by the studies of Heggested (1977) and Ben Naceur (2003) that asserted that there is no relationship between inflation and banks’ profitability.

4.4.8 Money Supply
For money supply, resulted in a positive relationship with bank’s profitability. The results confirmed that money supply is positively related to banks’ profitability. Moreover, the result supports the findings of Bourke (1989) and Molyneux and Thornton (1992) in which money supply was considered to be positively related to banks’ profitability. Besides, money supply is found to be significant in explaining banks’ profitability. These results are consistent with the findings of Haron and Azmi (2004) that there is significant long-run relationship between the banks’ profitability and money supply.

4.4.9 Competition
As mentioned earlier, competition is measured by the market share of the bank. The regression model shows that this variable has a negative relationship with banks’ profitability and is significant in explaining the bank’s profitability. These results are inconsistent. However, the empirical results support the findings of many authors. For instances, Lindley, James T., James A., James E. and Benton (1992) found that there was a negative and insignificant relationship between competition and new entry. This result also backed by the findings of Hassan and Bashir (2003) in which competition brings negative impact on bank’s performance. However, the results are not significant.

4.5 Conclusion
In chapter 4, the discussion of empirical results and major findings were discussed. Besides, the discussions of empirical results also include F- statistics, coefficient of determination and testing of each independent variable. The next chapter discusses about the implications and conclusion of the study.
CHAPTER FIVE
DISCUSSION, CONCLUSION AND IMPLICATIONS

5.1 Introduction
With the completion of data analysis in the previous chapter, this chapter provides recommendations for future research, policy implications and conclusion.

5.2 Implications of the study
5.2.1 Capital Ratio
The study found that there is an insignificant negative relationship between capital ratio and the profitability of Islamic banks. Although capital is not significant to affect the profitability of Islamic bank, a high capital ratio is still assumed has its supportive function on bank’s stability. Therefore, Islamic banks should always remain on the level of making profits and tolerate with Islamic banking regulations.

5.2.2 Bank Size
Bank size of the banks is represented by the total asset of the bank. The research found that there is an insignificant negative relationship between bank size and profitability of Islamic banks. Bank size is insignificant variable in determining the profitability in Islamic banks. Due to the Islamic banking regulation, Islamic banks are not allowed to involve in high risk activities; therefore, Islamic banks can raise their total asset by increasing the loan to customers. In order to increase the loan to customers, the bank should first increase the deposit of the customers so that they will have an excess fund to borrow to the customers. The bank can increase the deposit from customers by offering (hibah) gift in commercial banks to attract depositors, so that the banks will now have more money to make loan and other financial activities. Islamic banks can increase their asset by offering lower (riba) interest rate in commercial banks to attract more customers to borrow money.

5.2.3 Liquidity
Liquidity has an insignificant positive relationship with profitability of Islamic banks. Although liquidity is insignificant in our study, however, it is still possible to be an
indicative to affect banks’ profitability. In order to maximize profitability of bank, bank should lower the liquidity ratio in order to increase the income from loan. In other words, a bank could reduce the cost of loan to increase the lending to the public. Therefore, the bank could increase its profitability.

5.2.4 Asset Quality
Islamic banks should improve their asset quality by lower the loan losses reserve to total loan ratio in order to maximize profit. According to my finding, lower loan losses reserve to total loan ratio will show a higher profitability of a bank. Islamic banks can tighten their regulation of lending to avoid or reduce default rate and credit risk. When default rate and credit risk decreased, loan loss reserve will decrease as well. Lower loan loss reserve will indicate a lower asset quality ratio, and Islamic bank can earn a higher profit since banks have more money to increase financing activities.

5.2.5 Expenses Management
The study found that expenses management has a significant positive relationship with the profitability of Islamic banks. In order to maximize the bank’s profitability, policy maker should increase the necessary operating expenses and personnel expenses. Most of the banks nowadays imply cost reduction on their operating expenses by sacking extra employees especially when the economy is in the downturn. Employees with good performance should be remained. The banks should evaluate the performance of employee before sacking them, this is to improve the quality of employees and motivate them to provide better productivity. Although it drives up the unemployment rate in the industry, however, this is an opportunity for company to search for good quality’s employees. Other than that, banks should also regulate the policy and manage the maximum expenses in each department, so that it helps to reduce the cost of banks and maximize the profitability of banks.

5.2.6 Gross Domestic Product
There is a positive relationship between Gross Domestic Product (GDP) and profitability of Islamic banks in the measure of return on asset (ROA). However, this relationship is
insignificant. GDP may be represented by the country’s income; a high GDP will bring more profit to Islamic banks. Although the result shows that the relationship is insignificant, but economic growth and GDP may still bring an effect to the profitability of banks. Therefore, in order to increase the profit of Islamic banks, policy makers should first increase the GDP. By reducing the tax rate can help to increase the GDP, and it leads the profitability of Islamic banks to increase. Moreover, reducing the unemployment also help to increase the GDP and profitability of Islamic banks. Government can also increase the GDP by improving the productivity by producing more goods and services with the existing resources. As GDP increased, the profitability also increases.

5.2.7 Inflation
A result shows that there is an insignificant negative relationship between inflation and profitability of Islamic banks. However, inflation still an important factor could affect the credit quality. Therefore, actions should be taken to reduce the inflation. To control inflation, government or policy makers should tighten the monetary policy by keeping low federal funds lending rate in central bank. Besides, fix the country exchange rate can help to reduce inflation and help to reduce the losses of Islamic banks. Other than that, government plays an important role in controlling inflation. Government can increase the restrictions on the transfer of foreign currency reserves, by doing so, the foreign currency reserve can be reduced, and inflation can be lessened.

5.2.8 Money
There is a significant positive relationship between money supply and profitability of Islamic bank. Policy maker can consider increasing the money supply when Islamic banking industries is having recession problem. Islamic banks in Zanzibar can increase money supply by lower the reserve requirement or allow Islamic banks to widen their lending condition. This may help Islamic banks to have more opportunities to improve profit by increasing their financing activities.
5.2.9 Competition
There is a negative relationship between competition and the profitability of Islamic banks. However, this negative relationship is significant. Although competition is significant to affect the performance of banks, however, in the fundamental theory, high competition will reduce actually the profitability of banks. Islamic banks should enhance their competitive advantages in order to maximize their profitability. With good reputation and good customer services, a bank can actually retain their position in the Islamic banking industry.

5.3 Limitations of the Study
There are few limitations in this study. The biggest limitation in this study is that the researcher was only able to get a sample data of 5 financial years can be obtained. This is because Islamic banking was set in 2008, however, most of the Islamic banks in Zanzibar only set up in recent years, and they only have financial statement for up to 5 years.

Due to time and financial constraints, the researcher analyzed the profitability of the Islamic banks in Zanzibar based on secondary data. The secondary data were originated from various sources such like articles, journal and financial statements of the Islamic banks and were used to determine the factors that affect the profitability of the banks.

5.4 Recommendations for Further Research
There are numbers of researchers that have conducted the study of determinants that affect the profitability of Islamic banks; therefore the researcher suggests that future researchers should study on the determinants that were not studied by any researchers before. Future researchers can take more challenging determinants in their future research so that a valuable research and study can be produced. Other than that, because of there are now only 3 Islamic banks in Zanzibar, and it is believed that in future there will be more Islamic banks set up in Zanzibar, therefore the researcher suggests that future researchers can collect more data and have bigger sample size for analysis which
would predict the impact of those variable on the profitability of the banks as determined over a bigger sample size.

5.5 Conclusion
Islamic banking has emerged and grown rapidly since year 2008 and there are now 3 Islamic banks in Zanzibar. The examination of this research was to investigate the determinants of the profitability in Islamic banks in Zanzibar. For which the variables can be divided into internal and external variables. The internal variables included capital ratio, bank size, liquidity, and asset quality and expenses management while external variables included Gross Domestic Product (GDP), inflation, money supply and competition. The Return on Asset (ROA) was considered as a measurement of profitability. A data of 3 Islamic banks were considered and covered from year 2008 to 2012.

As overall, expenses management, money supply and Competition are significant determinants to impact on Islamic banks’ profitability. Money supply and Expenses management are positively related while Competition is negatively related to banks’ profitability. However, the determinants such as Bank size, capital ratio, liquidity, GDP and inflation do not significantly contribute to Islamic banks’ profitability in Zanzibar. Besides, an adverse relationship in expenses management suggests that Islamic banks should decrease the loan reserve and expenses in bank in order to improve its profit. The positive impact of money supply on banks’ profitability indicates the more money available in an economy could lead to higher profitability for Islamic banks in Zanzibar and in terms of Competition the market share should be increased in order to improve the profitability.
REFERENCES


