UNIVERSITI TEKNOLOGI MARA

DETERMINANTS OF BANKS POFITABILITY IN MALAYSIA

NORHANI KARMILA BINTI MOHD KHIROL HISHAM
2020976795

Bachelor of Business Administration (Hons.) Investment Management

Faculty of Business and Management

February 2022

UNIVERSITI TEKNOLOGI MARA

DETERMINANTS OF BANKS POFITABILITY IN MALAYSIA

NORHANI KARMILA BINTI MOHD KHIROL HISHAM
2020976795

Dissertation submitted in partial fulfillment
of the requirements for the degree of
Bachelor of Business Administration
(Investment Management)

Faculty of Business and Management

February 2022

AUTHOR'S DECLARATION

I declare that the work in this Final Year Project Paper was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student   :   Norhani Karmila binti Mohd Khirol Hisham

Student I.D. No.   :   2020976795

Programme   :   Bachelor of Business Administration

                                         (Investment Management) – BA251

Faculty   :   Business Administration

Tittle   :   Determinants Of Banks Pofitability In Malaysia

Signature of Student   :   ……………………………

Date   :   January 2022

ABSTRACT

The purpose is to determine the factors that influencing the profitability of the selected banks in Malaysia. Profitability is the main factor that can determine the bank's stability to survive in the long run and the research will be done by investigating the internal and external factors that can impact the bank's profitability. Therefore, the objective of this paper is to investigate the profitability of the selected banks in Malaysia. There are four independent variables will be examined to determine their relationship with bank's profitability and the data collected is from year 2009 until 2019. The study intends to carry out the determinants that influence the stability of the banks to enhance the profitability of the banks. Banks always has a problem in determining the main factor that influences their profitability and it has been an argument that profitability is the main factor that determines the survival of the company to survive in a long run. It's also one of the main contributors for a developing country such as Malaysia. Therefore, the study is to evaluate the determinants that influence the bank's profitability and find the relationship between size of the banks, bank's efficiency, liquidity, economic condition as the independent variables and the return on asset as the dependent variable. A quantitative analysis by analysing the data collected from 2009 until 2019 by using Pooled Ordinary Least Square.

ACKNOWLEDGEMENT

TABLE OF CONTENTS

CHAPTER THREE: RESEARCH METHODOLOGY

CHAPTER FOUR: FINDINGS AND ANALYSIS

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

LIST OF TABLES

LIST OF ABBREVIATION

Abbreviation

ROA	Return on Assets
LNTA	Natural Logarithm of Total Assets / Bank Size
ER	Efficiency Ratio
LDR	Loan-to-Deposit Ratio
GDP	Gross Domestic Product

CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

In Chapter 1, it generally describes the analysis that will be done in this research. The subtopics explain the general context of this research. It includes the statement, the background of this research, the issues from the research, the objectives of this research, hypothesis statements for this research, the significance of the study which generally introduces the general information of this study. The problem statements concerning on the selected variables that may influence the profitability of the bank which is also may be one of the factor in developing the countries profitability.

All variables, hypothesis questions and analysis about the topic included. In conclusion, this chapter is an overview for the topic given and the significance and limitation of this research also included in this chapter.

1.2 BACKGROUND OF THE STUDY

The purpose of this research is to determine the factors that influencing the profitability of the selected banks in Malaysia. Profitability is the main factor that can determine the bank's stability to survive in the long run and the research will be done by investigating the internal and external factors that can impact the bank's profitability. Basically, it measures the efficiency of a firms or business in comparison to an alternative investment, their capacity to provide a return on an investment depending on its resources.

Therefore, the objective of this paper is to investigate the profitability of the selected banks in Malaysia. Theoretical evidence is shown in this paper that financial institutions gain from bank size, bank's efficiency, liquidity, and economic condition prospects. It will also improve current knowledge and comprehension. There are four independent variables will be examined to determine their relationship with bank's profitability and the data collected is from year 2009 until 2019.

Thus, this research also aims to increase the existing knowledge and understanding regarding to the topic. In previous research, (Ali et al,. 2018) A firm that is not profitable will

not survive, and a business that is very successful will be able to reward its owners with significant returns on their investment. As a result, firms that aim to attain consistent profitability must be aware of both internal and external factors that might affect profitability. Therefore, there were several studies examining factors influencing the profitability of the banks. According to research from (Kiran et al, 2019), the banking industry is extremely vital to the economy. As the literature on the banking sector's significance rises, more attention is being paid to measuring its performance and determining the factors that influence it. The performance of banks may be measured in a variety of ways where as it include bank size, management efficiency, economic condition and liquidity ratio for the research.

In conclusion, the several determinants chosen are relevance to determine the profitability of the banks.

1.2.1   PROFITABILITY AND BANK SIZE

Bank size is calculated using the natural logarithm of a bank's total assets in US dollars (Aladwan et al.,2015). An asset is a valuable resource that provides benefits to the person, organisation, or country that owns or administers it (Adam Barone et al., 2021). It is one of the most important factors that will have a positive or negative impact on profitability (R Anand et al., 2017). For good reason, banks feel that profitability and scale are linked. By allowing banks to take advantage of economies of scale, larger banks can increase earnings. For example, increased scale allows banks to spread fixed expenses over a broader asset base, reducing average costs. Larger enterprises, as compared to small businesses, are thought to be able to produce things at a cheaper cost. This is due to the former's increased expertise and accumulated experience, as well as their ability to spread their fixed expenses over a bigger volume of output (Kigen, 2014).

1.2.2   PROFITABILITY AND LIQUIDITY

Liquidity is a key financial metric that evaluates whether a company can satisfy its short-term obligations without incurring significant losses (Kenton, 2021). As a result, liquidity is vital to the company's performance. A corporation's liquidity ratio will show potential investors and creditors that the company is strong and stable, having enough assets to weather any storms. The analysis of a company's liquidity may be done using a variety of methods. Liquidity may be described as a company's ability to transform funds from assets

like deposits, receivables, and inventory into cash (Hayes, 2021). According to Cara (2016), the benefit of robust company liquidity is that operational expansion, acquisitions, and upgrades can be funded more quickly, and unforeseen debts may be paid more easily.

1.2.3   PROFITABILITY AND BANKS EFFICIENCY

Banks and financial institutions that are efficient will have a competitive edge in such an environment. Banking efficiency is also essential for financial market stability (Schaeck et al., 2009). Furthermore, efficient banks are better equipped to diversify their businesses and allocate funds to economically viable activities in the economy, resulting in greater economic stability. Efficiency analysis illustrates how banks deliver the optimal mix of financial services based on a set of inputs (Kenton, 2021). On the one hand, a bank's ability to provide financial services to economic players in an efficient and fundamentally proficient manner must be considered. Banks, on the other hand, being financial entities, want to maximise profits.

1.2.4   PROFITABILITY AND ECONOMIC GROWTH

External factors such as the economy might also have an impact on bank profitability. In a previous study, Capraru and Ihnatov (Capraru et al., 2014) used ROE/ROA as a proxy for bank profitability and discovered statistical effects of macroeconomic factors (inflation and economic development) on ROA and ROE (Capraru et al., 2014). Several factors impact bank profitability, and a large body of empirical study has looked at the reasons of bank profitability, which may be classed as macroeconomic or banking-specific (Sinitin et al., 2020). Increased bank profitability can improve financial stability, which is good for business. Banks that are more lucrative can keep their profits and expand their core capital. They also provide better returns to stockholders and have a simpler time raising funds on the market (Flannery et al., 2008). Profitable banks, on the other hand, may be more risk averse since they stand to lose more if downside risks materialise (Keeley, 1990).

1.3 PROBLEM STATEMENT

The financial sector is the country's backbone, since it both supports and reflects economic progress. It is a crucial component of the balance of payments and has a significant

impact on economic growth. The efficiency with which an institution uses its resources, which include inputs and outputs, is frequently used to measure its performance. Thus, the efficiency of the banking sector has become a major concern in the modern global economy, particularly in the efficient growth of industries.

The study intends to carry out the determinants that influence the stability of the banks to enhance the profitability of the banks. However, banks always has a problem in determining the main factor that influences their profitability and it has been an argument that profitability is the main factor that determines the survival of the company to survive in a long run. There is currently a lack of evidence on the factors that influence bank profitability. Profitability of the banks is also one of the main contributors for a developing country such as Malaysia.

Although there were a large number of studies about profitability of the banks, only a limited number of studies that focus on Malaysia and study for the latest year. As the year passes by, bank's profitability is important for financial stability. Slower economic forecasts might hurt bank profits by reducing lending activity and perhaps increasing loan impairments. Returning banks to profitable levels that can be sustained are a critical step in assuring the sector's resilience, especially in the face of slower economic growth and the risk of economic uncertainty (Luis, 2019).

Therefore, the study is to evaluate the determinants that influence the bank's profitability and find the relationship between size of the banks, bank's efficiency, liquidity, economic condition as the independent variables and the profitability of the banks as the dependent variable. Hence, this study also intends to fill in the gaps left by Ali Alarussi and Sami Alhad.

1.4 RESEARCH QUESTIONS

i.   What is the relationship between the size of the banks and the profitability of the banks?

ii. What is the relationship between bank's efficiency and profitability of the banks?

iii. What is the relationship between liquidity and profitability of the banks?

iv. What is the relationship between economic condition and profitability of the banks?

1.5 RESEARCH OBJECTIVES

i. To examine the relationship between the size of the banks and the profitability

ii. To examine the relationship between the bank's efficiency and the profitability

iii. To examine the relationship between the liquidity of the banks and the profitability

iv. To examine the relationship between the economic condition of the banks and the profitability

1.6 SIGNIFICANCE OF THE STUDY

The research is as a benchmark for other researchers to analyse the profitability measure for conventional banks in Malaysia. It focuses on the relationship between return on asset (ROA) that can influence the profitability of the banks by size of the bank, bank's efficiency, liquidity of the banks and the economic condition. The data and information will be use from Thomson Reuters, Annual Reports, Bursa Malaysia, EViews and official websites of the banks. All the information is gathered.

1.7 SCOPE OF THE STUDY

This research will be using the data of Malaysian selected banks for the year 2009 until 2019 and the project will analysing four (4) banks over those 11 years. The selected banks are Malayan Bank, CIMB Bank, RHB Bank and Public Bank. The data for selected banks will be taken from their annual reports, online databases, other journals and publications. This study is to investigate the four selected variables such as bank's size, bank's efficiency, bank's liquidity, and economic condition. The study will use data from 2009 until 2019 and it is a secondary data. The data will be taken from online DataStream, Thomson Reuters, Annual Reports of the banks and Bursa Malaysia.

1.8 DEFINATIONS OF THE KEY TERMS

Table 1.1: Definations of Key Terms

Term	Definition
Profitability	The potential of a company in using their capital to increase the revenue in the excess of its expense (Melissa, 2021).
Return on Asset (ROA)	A determinant that used to determine how well a company managed their business to maximized profitability (Claire, 2021).
Bank Size	It measured as a natural logarithm on the value of Total Asset (Laevan et al., 2014).
Bank's Efficiency	A measurement on the optimization of output and input of an operation (Hayes, 2021). This is the ratio of Non-Interest Expense for the fiscal year to Total Revenue less Interest Expense for the same period and is expressed as percentage. Measures the cost to the bank of each unit of revenue. Lower values are better (Kenton, 2021).
Liquidity	The potential of the existing asset of the company at a price in respect of its intrinsic value determining they can easily bought or sold (Hayes, 2021). The measurement will be calculated by its ratios. The main ratio used for this project is Loan-to-Deposit ratio.
Economic Condition	The external factor selected is gross domestic product (GDP). It is the monetary worth of all completed products and services produced inside a country over a certain period (Callen, 2020).

1.9 SUMMARY

In this chapter, it includes all general information about this research and focuses on understanding the topic of this research which is to measure the bank's potential measurement that influence the profitability of the banks. Here can be concluding that this chapter is a review of the chosen topic by explaining the definition, the problem statement,

the importance of the research and the term used. Thus, this chapter also explain the idea of this research which is to study and analyse the chosen independent variables, bank size, bank's efficiency, liquidity, and the economic condition relationship between the dependent variable, Return on Asset.

CHAPTER TWO
LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter, it is fully a summarization of the information of previous research that related to the determinants that affect the profitability of the banks in Malaysia. The literature review intends to gives a better understanding and gathered a wide knowledge on the selected variables form previous researches. There are many opinion and point of view from other researchers that relate to this research. Each research has its own speciality and observation. All of them gathered to relate with this research as proves and supports for this research.

Thus, the analysis on the relationship between dependent and independent variables also included in this chapter and by gathering all information and knowledge from previous researches.

2.2 DETERMINANTS AFFECTING PROFIATBILITY OF THE BANKS

Most of the researchers use CAMELS approach as a method in considering the factors affecting banks profitability and performance. Ferrouhi (2018) said that CAMELS approach is from five elements (Capital Adequacy, Asset quality, Management, Earnings and Liquidity). According to Nurazi and Evans (2005), the adequacy ratio, asset quality, and management are all important factors. Earnings, liquidity, and bank size all have a role in explaining bank failures statistically. Siva and Natarjan (2011) discovered that CAMEL scanning aids banks in diagnosing their financial position and alerting them to take preventative measures to ensure their long-term viability.

Other empirical research use banks performance ratios and regression models to establish factors of bank performance. In Africa, Ferrouhi (2014) investigated the link between liquidity risk and financial performance of Moroccan banks, as well as the factors that influenced bank performance in Morocco from 2001 to 2012. The author employed four different bank performance ratios (ROA, ROE, ROAA and NIM). The results show that long-term performance of Moroccan commercial banks is influenced by deposits, short-term, long-term, and financing liquidity, bank size and square, internal and external funding, deposit

interest rates, and foreign direct investments, according to the findings.

Therefore, focusing into some of the selected determinants from the research and selected journal from previous research by Ali (2018), this research would be more interesting as there are lot of factors that still can be discover especially for developed country like Malaysia itself.

2.2 RETURN ON ASSET (ROA)

Return on Asset is the most important variables in measuring the profitability. It measures the management performance in terms of its resources and assets. Therefore, ROA is selected as dependent variables as it is the most important variable in measuring the performance of the bank. According to Komang (2020), the return on assets (ROA) is a metric used to assess a bank's total profitability. The net profit earned from operational activity that generates pre-tax returns is the profit received from earning before tax by a bank. It was believed that the bank will be able to determine the capability and efficiency in converting its assets into net income by using ROA. When comparing similar firms or evaluating a company's historical performance, ROA is most useful (Marshall, 2021). The fact that a company's assets fluctuate over time as it acquires and sells property, equipment, and inventory, as well as seasonal income fluctuations.

As stated by Ferrouhi (2018), ROA assesses a bank's profitability in relation to its assets, and hence its overall performance. Furthermore, in Naeem, Baloch, and Khan (2017) research, they measured the profitability of commercial banks in Pakistan using Return on Assets (ROA) and they defined ROA as one of the most important and relevant indicators of commercial banks profitability.

ROA reflects a bank's ability to generate profits from its assets in theory, though it may be biased due to off-balance sheet activities (Athanasoglou et al., 2005). The higher the ROA, the better the bank's management is at managing its performance. There are a few factors that can be associated with ROA for example, Total Loan, Total Asset (Alrashdan, 2002), and Stability Behaviour (Cipak et al., 2010). Otherwise, ROA is used in a financial institution because it evaluates a company's return on investment in a format that is easily compared with other banks and it is the most often used benchmark for profitability of banks (Remi Lukosiunas, 2017). Lastly, Return on assets (ROA) is a metric that evaluates how well a business can profit from its assets, regardless of size (Ben Mcclure, 2020).

2.3 BANK SIZE

An asset is a resource with economic worth that delivers advantages to the individual, organisation, or country that owns or manages it (Barone et al., 2021). It is one of the key elements that will influence profitability in either a favourable or bad way (Anand et al., 2017). The natural logarithm of a bank's total assets in US dollars is used to calculate bank size (Aladwan et al., 2015). The influence of size on profitability has been studied extensively in the past (Aladwan et al., 2015). When opposed to small businesses, larger businesses are believed to be able to create products at lower cost. This is attributed to the reason that the former have gained more knowledge and cumulative experience, as well as the ability to spread their fixed costs over a larger volume of output (Kigen, 2014). Profitability and size are believed to be associated by banks for good reason. Increased bank size can boost profits by allowing banks to take advantage of economies of scale. Increased scale, for example, helps banks to spread fixed expenses across a larger asset base, lowering average costs. Diversifying activities across product lines, industries, and locations can help banks decrease risk by increasing their asset size (Mester 2010).

According to Alkassim's (2005) analysis, overall assets hurt Jordanian commercial banks' profitability. According to Alrashdan's findings also stated that, ROA is positively related with liquidity and bank size, but negatively associated with financial leverage and cost of interest (Alrashdan et al. 2002). The similar conclusion was reached by Alkassim (2005), who discovered that overall assets hurt Jordanian commercial banks' profitability. ROA is positively correlated with liquidity and total assets, but negatively correlated with financial leverage. Thus, according to Mule et al,. (2015), there is a significant positive relationship between business size and profitability similarly to Trad et al., (2016) who found that their selected variable, which is variable size (SIZEBQ) affects positively and very significantly the profitability of Islamic Banking profitability. Increasing bank size (higher total assets) leads to higher profitability. While Haron's analyses showed that there is no substantial relationship between bank size and ROA.

On the other side, Hassan and Bashir (2003) showed that size had a negative influence on profitability. While, according to the findings by Shafee et al,. (2021) bank size, liquidity, and deposit ratio all have a significant and positive relationship with return on assets (ROA) and the findings of the estimation from Terreza (2015) who examined the effect of bank size of 1270 European banks reveal that the profitability of medium-sized banks has remained positive and significant over time.

10

Another research from Elseoud et al., (2002) whose have run regression on the determinants of Islamic Banks' profitability in Bahrain shows the result that Bank size is significantly positively related to banks' ROA similarly to a research from Muda et al., (2013) shows the result from their research about Comparative Analysis of Profitability Determinants of Domestic and Foreign Islamic Banks in Malaysia resulted that bank size have a significant effect in determining banks' profitability. Many studies have continued to be conducted and examined banks' efficiency issues, with the most important key element affecting profitability being asset size.

H_{01}: There is a no relationship between bank size and return on asset for selected banks in Malaysia.

H_{02}: There is a relationship between bank size and return on asset for selected banks in Malaysia.

2.4 LIQUIDITY

Liquidity is therefore critical to the success of the organisation. The liquidity ratio of a firm will inform potential investors and creditors that the company is solid and robust, with sufficient assets to weather any storms. Liquidity is a critical financial statistic that determines whether a firm can meet its short-term obligations without suffering unfavourable losses (Kenton, 2021). Working capital, current ratio, fast ratio, accounts receivable turnover, average collection time, inventory turnover, days sales in inventory, accounts payable turnover, loan-to-deposit and days payable outstanding are all used to assess liquidity, according to Hayes (2020). Ratios are a means to assess a company's efficiency based on information from the income statement, balance sheet, and cash flow statement. There are a variety of techniques to analysing a company's liquidity. It may be inferred that liquidity can be defined as a company's capacity to convert cash from assets such as deposits, receivables, and inventories (Hayes, 2021). The benefit of strong corporate liquidity, according to Cara (2016), is that operations growth, acquisitions, or renovations may be funded more simply, and unanticipated obligations can be paid more easily.

The chosen ratio for this study is loan-to-deposit ratio or also known as LDR. According to Murphy (2020), LDR is a metric that shows how successfully a bank attracts and retains clients. When a bank's deposits grow, it means more money and new customers are coming in. As a result, the bank will most likely have more money to lend, resulting in

more profits. It is monitored to ensure that there is sufficient liquidity to service loans in the case of a downturn, particularly when big withdrawals of short-term money occur (Disalvo et al,. 2017).

A study from Buchory (2015), indicates that loan to deposit ratio (LDR) has negative effect but no significant effect to the return on assets (ROA). Furthermore, there are also other studies stated that LDR has a significant effect on ROA, according to Usman (2003), Ariyanti (2010) and also the study for The Regional Development Bank (BPD) Bank reveal that the profitability of the BPD Bank, as measured by its Return on Assets (ROA) and Return on Equity (ROE), is highly influenced both internally and externally by total assets, LDR, OE/OI, and NIM. Except for OE/OI and inflation, which have negative associations with profitability, all of these factors have positive relationships with profitability (Supriyono et al., 2019).

Thus, Werdaningtyas (2002), on the other hand, discovered that LDR had no influence on ROA. Madjid (2013) looked at how Third-Party Funds (DPK), Loan to Deposit Ratio (LDR), and Operational Cost of Operating Income (BOPO) influenced Return on Assets (ROA). TPF does not appear to have a substantial impact on ROA, according to the findings. LDR and BOPO have a substantial impact on ROA.

Furthermore, a study from Kadang (2020) that done a research about factors influencing profit efficiency of banking in Indonesia shows the result that LDR has significantly affect the profitability of commercial banks in Indonesia in the period of 2010-2016.

H_{01}: There is a no relationship between liquidity and return on asset for selected banks in Malaysia.

H_{02}: There is a relationship between liquidity and return on asset for selected banks in Malaysia.

2.5 BANK'S EFFICIENCY

An efficiency ratio has a special meaning in the banking business. It demonstrates how successfully the bank's executives manage their overhead costs. Analysts may use this, to evaluate the performance of commercial and investment banks (Hayes, 2021). With a set of inputs, efficiency assessment reveals how banks provide the best combination of financial services (Kenton, 2021). On the one hand, one must consider a bank's capacity to supply

financial services for economic actors in an efficient and fundamentally proficient approach. Banks, on the other hand, being financial institutions, aim profitability. As a result of regulatory restraints, they are prevented from earning maximum profit (minimum reserve, capital adequacy requirements, etc). Their management has a lot of control over the cost of inputs, but not though over the cost of outputs (Worthington, 1998).

The majority of research explored the drivers of banking profitability where banking efficiency is included, or calculated the determinants of banking efficiency where one of the factor is Return on Assets or Return on Equity. Paleková (2015) analyzes the factors that influence banking efficiency in the Czech Republic and discovered a negative relationship between ROA and efficiency.

Another research from Elseoud et al., (2002) whose have run regression on the determinants of Islamic Banks' profitability in Bahrain shows the result that operating efficiency have significant and negative relationship with banks' ROA similarly to a research by Adhikari (2021) about Efficiency, Profitability and Stability of Nepalese Commercial Banks, shows a negative and significant relationship between bank efficiency and profitability.

While, in the new EU member nations, Košak and Zajc (2006) assessed the factors of efficiency and they discovered that ROA and ROE were connected to efficiency in a beneficial way. According to Palepu et al,. (2008), by using efficiency management, a company may achieve a relatively high profit margin. A research by revealed that there is a significant positive relationship between return on assets and efficiency of the banks similarly to a research from Muda et al., (2013) shows the result from their research about Comparative Analysis of Profitability Determinants of Domestic and Foreign Islamic Banks in Malaysia resulted that efficiency have a significant effect in determining banks' profitability. Many studies have continued to be conducted and needed to examine banks' efficiency issues, with the key element affecting profitability being banks' efficiency.

H_{01}: There is a relationship between bank's efficiency and return on asset for selected banks in Malaysia.

H_{02}: There is no relationship between bank's efficiency and return on asset for selected banks in Malaysia.

2.6 ECONOMIC CONDITION

Various variables influence bank profitability, and a vast number of empirical research have examined the causes of bank profitability, which may be classified into macroeconomic or banking-specific categories (Sinitin et al,. 2020). Economic condition is also one of external that might influence the profitability of the banks. Capraru and Ihnatov (Capraru et al., 2014), who employed ROE/ROA as a proxy for bank profitability and found statistical impacts of macroeconomic variables (inflation and economic development) on ROA and ROE in a prior work (Capraru et al., 2014). From 2004 to 2011, they looked at the profitability of 143 commercial banks in five CEE countries (Romania, Hungary, Poland, the Czech Republic, and Bulgaria), and they looked at some internal and external bank factors as independent variables (bank size, capital adequacy, credit risk, management efficiency, liquidity risk, and market concentration). These independent variables have been explored by the authors in previous studies (Petria et al., 2015) in 27 European Union nations over the period 2004-2011, and the results show that GDP growth has a positive impact on bank profitability, whereas inflation appears to have no impact.

Recent research looked at the drivers of ROA and ROE for banks listed on the Vietnamese stock exchange, using a basic OLS regression model that included GDP growth as a proxy among other factors (Pointer et al., 2019). None of the macroeconomic factors studied (including GDP) were shown to be predictive of either ROA or ROE. From the perspective of a bank's profitability, several countries have been investigated. Between 2005 and 2009, microeconomic (size, capital, loan, deposits) and external variables (GDP, inflation, and stock market capitalization) had a substantial influence on bank profitability in Pakistan (Gul et al., 2011).

However, Saona (2016) and Shehzad et al. (2013) found that during periods of significant economic growth, this variable may not have the expected relationship with the profit of the institutions, because banks tend to adjust their interest margins in response to the favourable economic situation, which may negatively affect their profitability. Thus, Djalilov et al,. (2016), García-Herrero et al. (2009), and Knezevic and Dobromirov (2016) showed no relationship between economic growth and bank profitability.

Another research from Elseoud et al., (2002) whose have run regression on the determinants of Islamic Banks' profitability in Bahrain shows the result that GDP growth have significant with banks' ROA.

H_{01}: There is a relationship between economic condition and return on asset for selected banks in Malaysia.

H_{02}: There is no relationship between economic condition and return on asset for selected banks in Malaysia.

2.7 CONCEPTUAL FRAMEWORK

INDEPENDENT VARIABLES   DEPENDENT VARIABLES
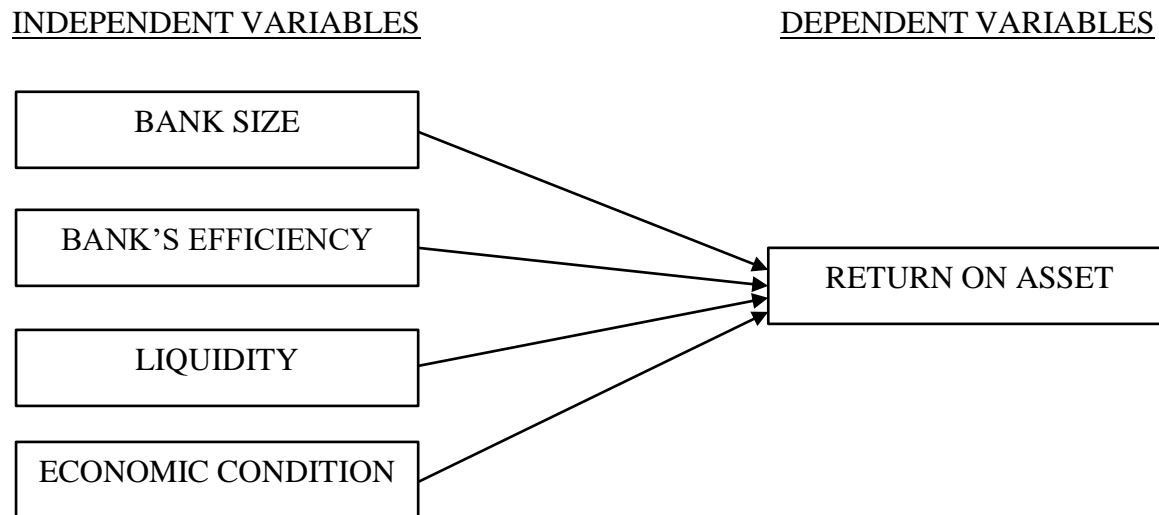
2.8 SUMMARY

In Chapter 2, the research contains all variables and discussion on determinants affecting the profitability of the banks from different point of view. It also includes a summary of the findings and conclusions, which might be utilised in future research investigations based on this research. Aspiring scientists will be able to understand the concept and deliver greater results in the future as a result of this.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 INTRODUCTION

In Chapter 3, it consists of research design, sampling technique, data collection, and variables. Generally this chapter explain the general information about data collected. It outlines the purpose of this study, strategy and, setting of the study, unit analysis and time horizon of the study.

3.2 SAMPLING

There are three banks selected which are Malayan Bank, CIMB Bank, RHB Bank and Public Bank. In Bursa Malaysia, there are variety of banks listed and the four banks selected concerning the availability of the data. The selected banks are the four top and famous banks in Malaysia that were well known among people in Malaysia. The other reason that also contributes in selecting the banks is the size of the banks. For the year 2019, Malayan Bank has the total assets of RM 834.4 billion, CIMB Bank RM 573.2 billion, RHB Bank RM 257.59 billion, and Public Bank RM 432.83.

The data collection is by using the data from year 2009 until 2019. This is because the data from 2020 until 2021 is not relevant due to crisis from Covid-19 that shift the data and make it abnormal than other years. Thus, the data from 2021 is insufficient.

3.3 DATA COLLECTION

The data collection is by using secondary sources. Secondary sources, such as annual reports, databases, other journals, papers, and others, are research databases that employ primary data to solve research problems and accumulate information. (Fellipe Martins et al, 2018). The information gathered are the four selected banks that are categorised in Bursa Malaysia.

3.3.1 ANNUAL REPORT

The data needed to compute the ratios of the listed financial institutions will be acquired from the annual reports of the corporations for each year covered in this study. From 2009 until 2019, every piece of information was collected.

3.3.2 THOMSON REUTERS

Thomson Reuters Datastream was also used to discover any relevant data for use in the study. Thomson Research is known for its investment research, which includes worldwide filings, yearly reports, and market data studies, among other things. It covers a broad variety of existing company research. Thomson Reuters provides the data, technology, and human expertise needed to provide accurate solutions.

3.3.3 EVIEWS

In addition, a range of methods were employed to estimate mathematical equations and systems of linear equations models using panel data in this study. Using EViews to quickly and efficiently store business data, does financial and statistical analysis, make forecasts or measurement data, and generate huge tables and graphs for publication in other applications. EViews were designed with the goal of maximising productivity in mind. EViews make evaluating economic results a pleasure.

3.3.4 BURSA MALAYSIA

Four financial firms from the Bursa Malaysia stock exchange were selected for this research. The chosen financial institutions were included in the table.

Table 3.1: Acronym for selected company.

No.	Company Name	Acronym
1	Malayan Banking Berhad	Maybank
2	Public Bank Berhad	Public Bank
3	Commerce International Merchant Bank Berhad	CIMB Bank
4	Rashid Hussein Bank	RHB Bank

3.4 VARIABLES

A variable is an idea or method that has a variable value. Dependent variables, independent variables, moderating variables, and meditating variables are the four major variables. There will be two sorts of variables in this analysis: dependent variables and independent variables.

3.4.1 DEPENDENT VARIABLES

The independent factors will have an influence on the dependent variables, according to the dependent and independent variables rule of thumb. The return on assets, which is linked to the bank's profitability, will be the dependent variable in this study. According to Athanasoglou (2005), return on assets may be explained by a bank's ability to generate revenue from its assets however it may be distorted due to off-balance-sheet activities. Divide a bank's net income by its total assets to get the return on assets.

3.4.2 INDEPENDENT VARIABLES

An independent variable has a positive or negative influence on the dependent variable. The independent variables selected were bank size, bank's efficiency, liquidity and default risk.

Table 3.2 : The Independent variables and the Measurement

Variables	Measurement	Proxy
Bank Size	LnTotal Asset	LNTA
Efficiency Ratio	Non-Interest Expense / (Total Revenue - Interest Expense)	ER
Loan-to-Deposit Ratio	Total Loans / Total Deposits	LDR
Gross Domestic Product	Nominal GDP / Deflator	GDP

3.5 RESEARCH DESIGN

The Bank Negara Malaysia provided secondary statistics on all banks participating in Malaysia's varied banking industry from 2009 to 2019 (BNM). The measurements for the determinants selected to compare them for each banks is assessed by using Pooled Ordinary Least Square. Panel data processing techniques are used to determine the H-statistic.

3.5.1 PURPOSE OF THE STUDY

The goal of this article is to look into the nature of performance for a few Malaysian banks. This article relates to and builds on prior research by providing an objective agreement on the performance of return on assets by analysing the bank size, bank's efficiency, liquidity and economic condition on chosen banks using more comprehensive factors. This study also discusses the difference for each feasible banking system profitability determinant. To acquire a better understanding of bank behaviour in Malaysia's banking system, an analysis of bank profitability drivers is required (Mouna et al., 2018).

3.5.2 TYPES OF INVESTIGATION

Causal and correlational studies are the two types of study. Because the variables have a reciprocal link, the type of research used in this study is known as correlational research. As a result, the goal of this research is to see how performance affects asset return by looking at bank size, bank's efficiency, liquidity and the economic condition.

3.5.3 EXTENT OF RESEARCHER INTERFERENCE

The influence of a researcher's reaction during an investigation is determined by the degree to which he or she reacts during the investigation. Minimum interference, moderate interference, and extreme interference are the three forms of interference that are often used. This attempt is sometimes seen as a limited activity since the researcher only has access to historical data findings from a bank.

3.5.4 STUDY SETTING

The research sample was split into two groups: contrived and non-contrived. A contrived research design is an intentionally manufactured research analysis, while a non-contrived research design may be apply in a natural setting and still work properly. This study used non-contrived research designs because the researcher performed an investigation to achieve the results and conducted the study in a natural context using secondary data to follow the causative sorts of unremarkable inquiry relationships.

3.5.5 UNIT OF ANALYSIS

This study focused on the following unit of analysis, which is data collection from organisations. Several factors must be considered as reasons to pick among the four financial institutions, including the capital market, the number of shares, and the financial institution's EPS. As we all know, large-cap stocks have a market value of $10 billion or more, while mid-cap stocks have a market value of $3 billion to $I0 billion (Jason Fernando, 2021). As a result, certain financial organisations have a large-cap status when they would otherwise be considered midcap. For the number of shares, usually, the ideal number of stocks to hold in a portfolio is about 20 to 30 stocks if referred to the investors in the United States as mostly in this financial institution they have 10 billion number shares (Silver et al, 2021) The EPS will then range from 1 to 99, with 99 being the best EPS rating, indicating that the company's profit growth has outperformed 99% of all publicly traded companies. (David Saito-Chung, 2021). As a result, mostly they have half percent for the EPS rating in the financial institution.

3.5.6 TIME HORIZON

The temporal range for this research is panel data because it was evaluated by four selected Malaysian banks during a eleven-year period from 2009 to 2019. Panel data are data sets that contain numerous observations per sample unit. It is possible to do so by combining time-series readings from multiple cross-sectional unit data (Patricia McManus, 20 1 1). Panel data is a word for multi-dimensional data that contains many periods of results for the same people or companies (Drica, 2019). The researcher uses a research template to find out how to get and gather data. It's also a set of data-analysis strategies and techniques. The purpose of the research, types of inquiry, and lime horizon will all be covered in this

subtopic.

3.6 RESEARCH METHODOLOGY

A quantitative analysis by analysing the data collected from 2009 until 2019 by using Pooled Ordinary Least Square.

3.7 HYPHOTHESIS STATEMENT

Hypothesis 1

H_{01}: There is no relationship between bank size and return on asset on selected banks in Malaysia.

H_{02}: There is a relationship between bank size and return on asset on selected banks in Malaysia.

Hypothesis 2

H_{01}: There is no relationship between bank's efficiency and return on asset on selected banks in Malaysia.

H_{02}: There is a relationship between bank's efficiency and return on asset on selected banks in Malaysia.

Hypothesis 3

H_{01}: There is no relationship between liquidity and return on asset on selected banks in Malaysia.

H_{02}: There is a relationship between liquidity and return on asset on selected banks in Malaysia.

Hypothesis 4

H_{01}: There is no relationship between default risk and return on asset on selected banks in Malaysia.

H_{02}: There is a relationship between default risk and return on asset on selected banks in Malaysia.

3.8 SUMMARY

To sum up, this chapter 3 examine and evaluate the data and sample that will be utilised to analyse this study. Descriptive analysis, correlation analysis, and regression analysis are all part of this concept. As a result, the independent factors in this study include profitability, liquidity, efficiency of the banks, and economic condition, whereas the dependent variable is the return on asset.

CHAPTER FOUR
FINDINGS AND DATA ANALYSIS

4.1 INTRODUCTION

In this chapter, will be focusing on the research findings and discussion. The relationships of the dependent variables which is return on asset (ROA), and the independent variables namely bank size or also known as natural logarithm of total Asset (LNTA), Efficiency ratio (ER), Loan-to-deposit ratio (LDR), and Gross Domestic Product (GDP) will be presented from four types of analysis which are descriptive analysis, correlation analysis and regression analysis. The results of the analysis were executed from EViews 12 version statistical tools. Thus, assumption test for the data also was implemented by using normality test.

4.2 DESCRIPTIVE ANALYSIS

Table 4.1: Result of Descriptive Analysis

Date: 12/30/21   Time: 06:41
Sample: 1 44

	ROA	LNTA	ER	LDR	GDP
Mean	1.130000	19.64153	49.95455	89.37727	4.730000
Median	1.160000	19.64757	52.05000	90.55000	5.090000
Maximum	1.560000	20.54224	68.20000	95.60000	7.400000
Minimum	0.260000	18.56118	34.20000	77.30000	-1.500000
Std. Dev.	0.271781	0.481215	9.679863	4.587894	2.155447
Skewness	-0.785747	-0.030554	-0.290201	-1.029090	-2.056155
Kurtosis	3.651670	2.528586	1.850914	3.399904	6.886949
Jarque-Bera	5.306158	0.414270	3.038320	8.059381	58.70237
Probability	0.070434	0.812910	0.218896	0.017780	0.000000
Sum	49.72000	864.2275	2198.000	3932.600	208.1200
Sum Sq. Dev.	3.176200	9.957417	4029.089	905.0973	199.7760
Observations	44	44	44	44	44

Notes: Return on Assets (ROA), Bank Size or Natural Logarithm of Total Asset (LNTA), Efficiency Ratio (ER), Loan-to-Deposit Ratio (LDR), and Gross Domestic Product (GDP).

Table 4.1 above shows the results of descriptive analysis of the dependant and independent variables for four (4) selected banks in Malaysia. The total observation for this analysis is 44 data which consists of the data from year 2009 until 2019 in annually basis. It is used to evaluate the results from the analysis of the independent variables which are Bank Size or Natural Logarithm of Total Asset (LNTA), Efficiency Ratio (ER), Loan-to-Deposit Ratio (LDR), and Gross Domestic Product (GDP) towards Return on Assets (ROA).

4.2.1 MEAN

Mean is the average value for the total value of the variable. The mean value for the dependent variable is 1.1300 and the mean values for the independent variables are 19.6415, 49.9545, 89.3772, 4.7300 for LNTA, ER, LDR, and GDP respectively. To conclude, the highest mean is LDR and the lowest mean is ROA.

4.2.2 MEDIAN

Median is the middle of the total value of the variable. The median value for the dependent variable is 1.1600 and the mean values for the independent variables are 19.6475, 52.0500, 90.5500, 5.0900 for LNTA, ER, LDR, and GDP respectively.

4.2.3 MAXIMUM

Maximum is the largest value of the variable. The maximum value for the dependent variable is 1.5600 and the mean values for the independent variables are 20.5422, 68.2000, 95.6000, -1.5000 for LNTA, ER, LDR, and GDP respectively.

4.2.4 MINIMUM

Minimum is the lowest value of the variable. The minimum value for the dependent variable is 0.2600 and the mean values for the independent variables are 18.5611, 34.2000, 77.3000, 7.4000 for LNTA, ER, LDR, and GDP respectively.

4.2.5 STANDARD DEVIATION

Standard deviation is known as the spread of how far the results will be from the mean or average value of the variable. The standard deviation value for the dependent variable is 0.2717 and the mean values for the independent variables are 0.4812, 9.6798, 4.5878, 2.1554 for LNTA, ER, LDR, and GDP respectively.

4.2.6 SKEWNESS

Skewness is a technique to calculate the asymmetry of the distribution of the variable around their mean. The skewness value for the dependent variable is -0.7857 and the mean values for the independent variables are -0.0305, -0.2902, -1.0920, -2.0561 for LNTA, ER, LDR, and GDP respectively. The value of the skewness also indicates that all of the variables has negative skewness, meaning that all of the variables have long left tail.

4.2.7 KURTOSIS

Kurtosis is to measure the flatness or tallness of the variable. The kurtosis value for dependent variable is 3.6516 and the mean values for the independent variables are 2.5285, 1.8509, 3.3999, 6.8869 for LNTA, ER, LDR, and GDP respectively. It indicates that LDR and GDP are leptokurtic since the value is more than 3.

4.3 CORRELATION ANALYSIS

Table 4.2: Result of Regression Analysis

Covariance Analysis: Ordinary
Date: 12/30/21   Time: 06:48
Sample: 1 44
Included observations: 44

Correlation t-Statistic Probability	ROA	LNTA	ER	LDR	GDP
ROA	1.000000				

LNTA	-0.090670	1.000000			
	-0.590042	-----			
	0.5583	-----			
ER	-0.709288	0.382304	1.000000		
	-6.520913	2.681294	-----		
	0.0000	0.0104	-----		
LDR	-0.142287	0.522430	0.058123	1.000000	
	-0.931606	3.970682	0.377320	-----	
	0.3569	0.0003	0.7078	-----	
GDP	0.237981	0.188498	-0.053255	0.262294	1.000000
	1.587913	1.243903	-0.345624	1.761533	-----
	0.1198	0.2204	0.7314	0.0854	-----

Table 4.2 shows the results of correlation analysis between dependent variable and the dependent variables of this research. To analyse the results, the rules of thumb for the correlation are; when it shows the value of correlation near to -1, it indicates that it has strong negative relationship and correlation value that is near to +1, it indicates that it has strong positive relationship while if the correlation value is 0, there is no relationship between the variables. To determine the significance level, the value must be below 5% or 0. 05.

4.3.1 BANK SIZE

LNTA and ROA correlation value is -0.09067, meaning that it have weak negative correlation. Meanwhile the p-value for the correlation between LNTA and ROA is 0.5583 meaning that LNTA and ROA have insignificant relationship since the p-value is above 5%.

4.3.2 BANKS EFFICIENCY

ER and ROA correlation level is -0.7092. This result indicates that they have strong

26

negative relationship. Meanwhile the p-value for ER and ROA is 0.0000, meaning that they ER and ROA has significant relationship since the value is below 5%.

4.3.3 LIQUIDITY

LDR and ROA correlation value is -0.1422, a weak negative correlation. The p-value for LDR and ROA is 0.3569, which indicates that LDR and ROA has insignificant relationship since the value is above 5%.

4.3.4 ECONOMIC CONDITION

GDP and ROA correlation value is 0.2379, a weak positive correlation. The p-value for GDP and ROA is 0.1198, which indicates that GDP and ROA has insignificant relationship since the value is above 5%.

4.4 POOLED ORDINARY LEAST SQUARES

Table 4.3: Result of Regression Analysis

Dependent Variable: ROA
Method: Panel Least Squares
Date: 12/30/21   Time: 06:52
Sample: 1 44
Periods included: 11
Cross-sections included: 4
Total panel (balanced) observations: 44

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.022144	1.117444	-0.019817	0.9843
LNTA	0.201325	0.069779	2.885167	0.0063
ER	-0.022867	0.002965	-7.713186	0.0000
LDR	-0.020013	0.006846	-2.923487	0.0057
GDP	0.027239	0.012566	2.167735	0.0363

R-squared	0.644823	Mean dependent var		1.130000
Adjusted R-squared	0.608394	S.D. dependent var		0.271781
S.E. of regression	0.170076	Akaike info criterion		-0.598492
Sum squared resid	1.128115	Schwarz criterion		-0.395743
Log likelihood	18.16683	Hannan-Quinn criter.		-0.523303
F-statistic	17.70107	Durbin-Watson stat		0.535320
Prob(F-statistic)	0.000000			

Table 4.3 shows the result of regression analysis from EViews software. From the results, the multiple linear regression equation for the results are as follows;

$$ROA_{it} = -0.022144 + 0.201325LNTA_i - 0.022867ER_i - 0.020013LDR_i + 0.027239GDP_i + \varepsilon_i$$

4.4.1 T-STATISTICS

T-statistics in this analysis is to identify the independent variables either they has positive relationship or negative relationship with the dependent variable.

4.4.1.1 BANK SIZE

H_0: There is no significant relationship between LNTA and ROA

H_A: There is significant relationship between LNTA and ROA

The coefficient value for LNTA is 0.2013 which indicates that as ROA increase by 1%, LNTA will increase by 20.13% assuming other variables remain constant which also indicates that LNTA and ROA has a positive relationship. While, the p-value for LNTA is 0.0063. Since the value of the p-value is lower than 5%, this finding reject the null hypothesis and also can be conclude that there is significant relationship between LNTA and ROA.

4.4.1.2 BANKS EFFICIENCY

H_0: There is no significant relationship between ER and ROA

H_A: There is significant relationship between ER and ROA

The coefficient value for ER is -0.0228 which indicates that as ROA increase by 1%, ER will decrease by 2.28% assuming other variables remain constant which also indicates that LNTA and ROA has a negative relationship. While, the p-value for ER is 0.0000. Since the value of the p-value is lower than 5%, this finding reject the null hypothesis and also can be conclude that there is significant relationship between ER and ROA.

4.4.1.3 LIQUIDITY

H_0: There is no significant relationship between LDR and ROA

H_A: There is significant relationship between LDR and ROA

The coefficient value for LDR is -0.0200 which indicates that as ROA increase by 1%, LDR will decrease by 2% assuming other variables remain constant which also indicates that LDR and ROA has a negative relationship. While, the p-value for LDR is 0.0057. Since the value of the p-value is lower than 5%, this finding reject the null hypothesis and also can be conclude that there is significant relationship between LDR and ROA.

4.4.1.4 ECONOMIC CONDITION

H_0: There is no significant relationship between GDP and ROA

H_A: There is significant relationship between GDP and ROA

The coefficient value for GDP is 0.0272 which indicates that as ROA increase by 1%, GDP will increase by 2.72% assuming other variables remain constant which also indicates that GDP and ROA has a positive relationship. While, the p-value for GDP is 0.0363. Since the value of the p-value is lower than 5%, this finding reject the null hypothesis and also can be conclude that there is significant relationship between GDP and ROA.

4.4.2 F-STATISTICS

H_0: There is no significant relationship between all variables and ROA

H_A: There is significant relationship between all variables and ROA

The result of F-Test is 17.7010 and the p-values of the F-Test is 0.0000. It shows that the p-value of F-test is less than 5 % level of significance. Therefore, at 5% level of significance reject the null hypothesis. It indicates that at least one of the independent variable have significant impact on ROA. Thus, this also shows that the model is fitted.

### 4.4.3 R-SQUARED

The R-squared for the model is 0.6448 which indicates that 64.48% of the variance in the dependent variable, ROA explained by the independent variables, LNTA, ER, LDR, and GDP. The remaining 35.52% is explained by the other factors.

4.4.4 ADJUSTED R-SQUARED

The adjusted R-Squared for the model is 0.6084 which indicates that 60.84% of the variance in the dependent variable, ROA explained by the independent variables, LNTA, ER, LDR, and GDP after adjusted degree of freedom.

4.5 NORMALITY TEST

Diagram 4.1: Result of Normality Test
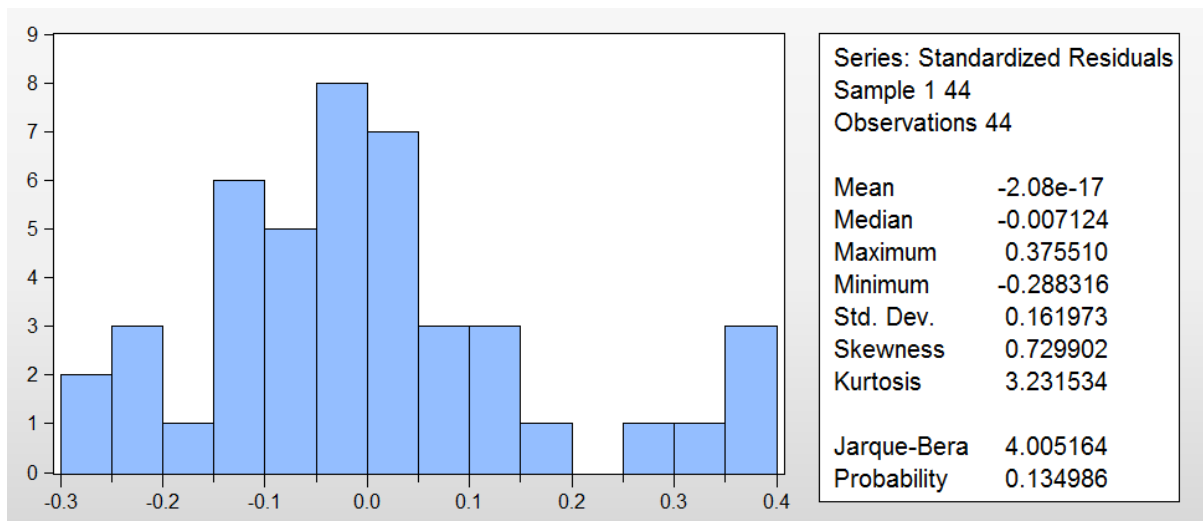
H_0: Error term is normally distributed

H_A: Error term is not normally distributed

The table above shows that Jarque-Bera results for the sample is 4.0052 and the p-value is 0.1350. The result shows that the p-value is more than 5%, meaning that the findings fail to reject the null hypothesis. Therefore, the conclusion is the error term is normally distributed.

4.6 SUMMARY

This chapter is the compilation of all the empirical findings that has been run through EViews software. Pooled Ordinary Least Squares (POLS) method was implemented and the regression analysis has been analysed. There are also other analysis such as descriptive analysis, correlation analysis and one assumption test. The results for the analysis have been presented and has been analysed. From the POLS, all of the independent variables have

significant impact towards return on assets for the selected banks in Malaysia. Thus, the results for this finding will include further understanding of other researcher's point of view to be concluded and supported by other researches in the next chapter.

CHAPTER FIVE
CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

In chapter five, all of the findings will be concluded and relate to the objectives of this research. It is also the summarization of the analysis that has been tested and to conclude the previous chapter of this research. Recommendations and conclusions also included for the research.

5.2 LIMITATIONS OF THE STUDY

The availability of data is one of the limitations that I have been through. Therefore, there were lack of variable in the study, I changed one of the variable from risk ratio to economic growth and one of the measurement for liquidity from current ratio to loan-to-deposit ratio because of this limitation. I believe that this limitation is due to protecting the privacy of the company.

Next, the other limitation is in collecting the accurate data. The accuracy of the data is suspicious because there are some of other platform provide slightly different numbers that may be because of the used of decimal places.

Lastly, the sample sizes for this research. The sample size is too small as the total observation for this research is only 44 observations. Due to this limitation, I have found out that the results for this research contradict with some findings from other researchers such as for economic growth variable, most of the findings shows that there were insignificant effect for economic growth and total asset but my result shows there is significant effect between economic growth and total assets.

5.3 CONCLUSION

The research objective is to investigate the relationship between the dependent variables Return on Assets, and the independent variables, Bank Size, Bank's efficiency,

Liquidity and Economic Condition. The data and observations from 2009 to 2019 are collected for this research.

5.3.1 BANK SIZE

Bank size is the natural logarithm of the Total Assets. It was used to compare the size of each bank. The coefficient analysis shows 0.2013 for bank size, meaning that bank size has a positive relationship with the dependent variable, Return on Asset. While the p-value 0.0063 which means that bank size has a significant relationship with Return on Assets because the significant level is less than 5%. While for t-statistic test, bank size has a positive relationship with the return on asset and it has a significant relationship with the return on assets. Bank size plays a vital role for a company. The larger the bank size, the longer terms the company can survive. Thus, there are some researchers said that the potential to maximise earnings is decided by the management's viable set of assets and liabilities, as well as the bank's unit expenses for creating each component of assets (Nzongang et al,. 2006). Thus, Sritharan (2015) stated that the size of a company refers to its ability, as well as the variety and number of production capabilities, as well as the amount and range of services or products it can provide simultaneously to its clients. Simply said, the size of a company's management group or the number of assets it has in comparison to others in the same sector is the greatest indicator of its size.

The results also supported by Alrashdan's finding, ROA is positively related with bank size (R Alrashdan et al. 2002), and research from Komang et al,. (2020) stated that the size of the bank has a positive impact on its return on assets (ROA). This can happen because if a large bank's total assets increase market confidence and large assets are used in bank operations, especially lending, it has a positive effect on increasing profitability, resulting in an increase in revenue that exceeds total assets, resulting in higher profits and a higher return on assets (ROA). Thus, Yahya (2017) highlighted that the effect of size on ROA, resulting in a size that has a significant positive impact on profitability. Similar to the findings from Terreza (2015) who examined the effect of bank size of 1270 European banks reveal that the profitability of medium-sized banks has remained positive and significant over time.

5.3.2 BANK'S EFFCIENCY

Bank's efficiency demonstrates how successfully the bank's management manage

their overhead costs (Kenton, 2021). The coefficient analysis shows -0.7092 for bank's efficiency, meaning that bank's efficiency has a negative relationship with the dependent variable, (Return on Asset). While the p-value 0.0000 which means that bank's efficiency has a significant relationship with Return on Assets because the significant level is less than 5%. While for t-statistic test, bank's efficiency has a negative relationship with the return on asset and it has a significant relationship with the return on assets. Efficiency strategy helps organisation in producing a standard, high-volume product or service at the most competitive price to customers. It also helps organisation competing in emerging economies, such as China, India, and others, in achieving higher financial performance, as firms can gain a relative advantage due to lower labour resource and manufacturing costs (Aulakh et. al, 2000).

The result supported by Paleková (2015) analyzes the factors that influence banking efficiency in the Czech Republic and discovered a negative relationship between ROA and efficiency. Thus, the finding also supported from the results from Adhikari (2021) about Efficiency, Profitability and Stability of Nepalese Commercial Banks, shows a negative and significant relationship between bank efficiency and profitability.

5.3.3 LIQUIDITY

The loan-deposit ratio (LDR) is the proportion of total loans to total deposits in a bank. By comparing a bank's total loans to its total deposits for the same time, the LDR is used to measure a bank's liquidity. The coefficient analysis shows -0.0200 for liquidity, meaning that liquidity has a negative relationship with the dependent variable, (Return on Asset). While the p-value 0.0057 which means that liquidity has a significant relationship with Return on Assets because the significant level is less than 5%. While for t-statistic test, liquidity has a negative relationship with the return on asset and it has a significant relationship with the return on assets.

The result are supported by other studies stated that LDR has a significant effect on ROA, according to Usman (2003), Ariyanti (2010) and also the study for The Regional Development Bank (BPD) Bank reveal that the profitability of the BPD Bank, as measured by its Return on Assets (ROA) and Return on Equity (ROE), is highly influenced both internally and externally by LDR. Thus, the finding from Kadang (2020) resulted that LDR has significantly affect the profitability of commercial banks.

5.3.4 ECONOMIC CONDITION

The coefficient analysis shows 0.0272 for economic condition, meaning that economic condition has a positive relationship with the dependent variable, (Return on Asset). While the p-value 0.0363 which means that economic condition has a significant relationship with Return on Assets because the significant level is less than 5%. While for t-statistic test, economic condition has a positive relationship with the return on asset and it has a significant relationship with the return on assets.

The finding supported by results from other research (Petria et al., 2015) which stated that GDP growth has a positive impact on bank profitability and Gul et al,. (2011) also stated that external variables (GDP, inflation, and stock market capitalization) had a substantial influence on bank profitability. The findings also supported by Elseoud et al., (2002) whose have run regression on the determinants of Islamic Banks' profitability in Bahrain shows the result that GDP growth have significant with banks' ROA.

5.3.5 OVERALL RESULT

Based on the R-squared result, the findings show that the value is 0.6448 which indicates that 64.48% of the variance in the dependent variable, ROA explained by the independent variables, LNTA, ER, LDR, and GDP. The remaining 35.52% is explained by the other factors that are not used in this research.

5.4 RECOMMENDATION

Despite the limitations of this study, the findings should serve as a basis for future research to refine and develop more relevant models.

5.4.1 BANKS

Banks that wanted to boost their capital, they should focuses on their assets and alert on the economic condition increase in order to increase their profitability and to persuade

investors to invest in their company.

5.4.2 INVESTORS

Investors should do an analysis or fast study before making investment decisions, such as a fundamental analysis on the selected company, and solely rely on the outcomes of this research to make investment decisions that have a significant effect on the profitability of the banks.

5.4.3 STUDENTS OR RESEARCHER

Students and researchers projects at the same time are urged to utilise or add other variables in addition to the bank size, liquidity, banks efficiency, and economic growth. They should strengthen their sample or observation by extending their study time in order to produce a better summary of results and more meaningful financial ratios. The purpose is to produce more representative analytic results. Finally, future researches should consider employing more than one nation because different countries have different facts and statistics.

References

Adhika P. R. (2021). Efficiency, Profitability and Stability of Nepalese Commercial Banks. THE BATUK : A Peer Reviewed Journal of Interdisciplinary Studies. Vol. 7, Issue No.1, January 2021, Page: 1-12. ISSN 2392-4802. Retrieved from https://doi.org/10.3126/batuk.v7i1.35334

Ahmed, R. and Bhuyan, R. (2020). Capital Structure and Firm Performance in Australian

Service Sector Firms: A Panel Data Analysis. Journal of Risk Financial Management. 13, 214; doi:10.3390/jrfm13090214

Alarussi, A.S. and Alhaderi, S.M. (2018), "Factors affecting profitability in Malaysia", Journal of Economic Studies, Vol. 45 No. 3, pp. 442-458. https://doi.org/10.1108/JES-05-2017-0124

Aulakh, P. S., Masaaki, K. & Hildy T. (2000). Export Strategies and Performance of Firms from Emerging Economies: Evidence from Brazil, Chile, and Mexico, Academy of Management Journal, 43 (3), 342–61.

Bojāre, K. and Romānova, I. (2017). The Factors Affecting the Profitability of Banks: The Case of Latvia. International Journal of Economics and Business Administration, Vol. V, Issue 4, 2017, pp. 78-95. https://www.ijeba.com/dmdocuments/2017/2017_V_4_5.pdf

Buchory. H. A. (2015). Banking intermediation, operational efficiency and credit risk in the banking profitability. International Journal of Business, Economics and Law, Vol. 7, Issue 2 (Aug.) ISSN 2289-1552. Retrieved from: https://www.ijbel.com/wp-content/uploads/2015/09/BANKING-INTERMEDIATION-OPERATIONAL-EFFICIENCY-AND-CREDIT-RISK-IN-THE-BANKING-PROFITABILITY.pdf

Căpraru B., Ihnatov I., 2014. Banks' Profitability in Selected Central and Eastern European Countries. Procedia Economics and Finance, 16, pp. 587-591.

Djalilov, Khurshid, and Piesse J. 2016. Determinants of bank profitability in transition countries: What matters most? Research in International Business and Finance 38: 69–82.

Elseoud M. S. A, Yassin M., Ali M. A. M. (2020). Using a panel data approach to determining the key factors of Islamic banks' profitability in Bahrain, Cogent Business & Management, 7:1, DOI: 10.1080/23311975.2020.1831754

García-Herrero, Alicia, Sérgio Gavilá, and Daniel Santabárbara. 2009. What explains the low profitability of Chinese banks? Journal of Banking and Finance 33: 2080–92

Guindos, L. (2019). Challenges for bank profitability. European Central Bank Euro System. Retrieved from: https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp190501~7733ecc1a9.en.html

Gul S., Irshad F., Zaman K., 2011. Factors Affecting Bank Profitability in Pakistan. The Romanian Economic Journal, XIV, 39, pp. 61-87.

Hargrave, M. (2021). Return on Assets (ROA). Investopedia. Retrieved from: https://www.investopedia.com/terms/r/returnonassets.asp

Hayes, A. (2021). Asset Turnover Ratio. Investopedia. Retrieved from: https://www.investopedia.com/terms/a/assetturnover.asp

Horton, M. (2021). The Difference Between Profitability and Profit. Investopedia. Retrieved from: https://www.investopedia.com/ask/answers/012715/what-difference-between-profitability-and-profit.asp

Itumo, N. P. (2013). Relationship Between Efficiency And Financial Performance Of Commercial Banks In Kenya. Retrieved from: http://erepository.uonbi.ac.ke/bitstream/handle/11295/58896/Ngunyu_Relationship%20between%20efficiency%20and%20financial%20performance%20of%20commercia

l%20banks%20in%20Kenya.pdf?sequence=3&isAllowed=y

Kagan, J. (2020). Default Risk. Investopedia. Retrieved from: https://www.investopedia.com/terms/d/defaultrisk.asp

Kigen, W. K.. (2014). The effect of firm size on profitability of insurance companies in Kenya. Unpublished MBA project. University of Nairobi.

Kenton, W. (2021). Efficiency Ratio Defination. Investopedia. Retrieved from: https://www.investopedia.com/terms/e/efficiencyratio.asp

Knezevic, Ana, and Dusan Dobromirov. 2016. The determinants of Serbian banking industry profitability. Economic Research-Ekonomska Istrazivanja 29: 459–74.

Košak, M. Zajc, P. (2006). Determinants of bank efficiency differences in the new EU member countries. Financial Stability Report, Expert Papers. Ljubljana: Bank of Slovenia.

Lauren, L, Ratnovski, L, and Tong, H. (2014). Bank Size, Capital Requirements, and Systemic Risk: Some International Evidence. Retrieved from: https://www.ecb.europa.eu/events/pdf/conferences/140902/bank_size_and_systemic_risk.pdf?3a7a70d742f3995e51e4483b9fe4adbb#:~:text=Bank%20size%20is%20measured%20as,to%20total%20risk%2D%20weighted%20assets.

Lohano, Kiran and Kashif, M. (2019). Factors Affecting the Profitability of Banks in Developing Countries. 14. 74-91.

Madjid, N. C. (2013). The effect of third-party funds (TPF) and liquidity (LDR) on return on assets (ROA) of banking companies listed on the Indonesian stock exchange. Essay, 1(921409069).

Mester, Loretta J. 2010. "Scale Economies in Banking and Financial Regulatory Reform," The Region, Federal Reserve Bank of Minneapolis, September, pp. 10–13.

Muda, M., Shaharuddin, A., & Embaya, A. (2013). Comparative Analysis of Profitability

Determinants of Domestic and Foreign Islamic Banks in Malaysia. International Journal of Economics and Financial Issues, 3(3), 559–569. Retrieved from https://www.econjournals.com/index.php/ijefi/article/view/462

Nzongang, T. & Atemnkeng, J. (2006). Market structure and profitability performance in the banking industry of CFA countries: the case of commercial banks in Cameroon. Available from: https://pdfs.semanticscholar.org/d2b0/d261c3ccb484cb1faaab0b1b43ed62f16e6e.pdf

Palečková, I. (2015). Estimation of banking efficiency determinants in the Czech Republic. Journal of Applied Economic Sciences, vol. 10, no. 2, pp. 234–242.

Palepu, K. and Healy P. (2008). Business analysis and valuation: Using financial statements. 4 th edition. Mason, OH: Thomson South-western.

Petria N., Căpraru B., Ihnatov I., 2015. Determinants of banks' profitability: evidence from EU 27 banking systems. Procedia Economics and Finance, 20, pp. 518-524.

Sarker, Niluthpaul & Islam, Roushanara. (2021). Issues on Bank's Capital Structure and Profitability: A Developing Country Context. International Journal of Economics and Business Administration. IX. 86-104. 10.35808/ijeba/660.

Setiadi, P. B. (2010). Analysis of the relationship between the spread of interest rate, fee-based income, and loan to deposit ratio with ROA in banks in East Java. Jurnal Mitra Ekonomi Dan Manajemen Bisnis, 1(1), 63.

Shafee N. B, Suhaimi S., Hashim H., Mustafa M. A. & Mohd S. N. H. (2021). The Profitability of Commercial Banks in Malaysia. Special Issue: Recent developments in Economics, Business and Management. Vol. 39 No. 10. Retrieved from: https://doi.org/10.25115/eea.v39i10.5337

Sritharan, V. (2015). Does firm size influence on firm's profitability? Evidence from listed firms of Sri Lankan Hotels and Travels sector. Research Journal of Finance and

Accounting. ISSN 2222- 2847.

Sufian, F. (2009). Factors Influencing Bank Profitability in a Developing Economy: Empirical Evidence from Malaysia. Global Business Review, 10(2), 225–241. https://doi.org/10.1177/097215090901000206

Sulaiman, A.A., Mohamad, M. and Mohd N.M (2019). The Determinants of Bank Profitability: How Malaysian Islamic Banks Response to the Financing Risk. 195-212.

Terraza V. (2015). The effect of bank size on risk ratios: Implications of banks' performance. Procedia Economics and Finance 30. 903 – 909. DOI: 10.1016/S2212-5671(15)01340-4

Trad N., Trabelsi M. A., and Goux J. F. (2016). Risk and profitability of Islamic banks: A religious deception or an alternative solution?. European Research on Management and Business Economics. DOI: 10.1016/j.iedeen.2016.09.001

Yahya T., Akhtar A. and Tabash M. I., "The Impact of Political Instability, Macroeconomic and Bank-Spesific Factors on the Profitability of Islamic Banks: an Empirical Evidence," Investment Management and Financial Innovations, vol. 14, no. 4, pp. 30-39, 2017.

Company	Year	ROA	LNTA	ER	LDR	GDP
Maybank	1	0.26	19.47	68.2	87.4	-1.5
Maybank	2	1.23	19.55	48.2	86.8	7.4
Maybank	3	1.2	19.76	48	90.1	5.3
Maybank	4	1.25	19.93	49.5	91.5	5.5
Maybank	5	1.28	20.06	50.4	91.3	4.7
Maybank	6	1.15	20.19	58.1	93.2	6
Maybank	7	1.04	20.38	57.9	92.7	5.09
Maybank	8	0.96	20.42	56	93.2	4.45
Maybank	9	1.04	20.46	58	93.8	5.81
Maybank	10	1.06	20.51	57.8	92.7	4.84
Maybank	11	1.03	20.54	59.9	92.4	4.44
CIMB	1	1.36	19.30	54.5	79.5	-1.5
CIMB	2	1.44	19.41	57.6	83.8	7.4
CIMB	3	1.42	19.52	55.1	86.2	5.3
CIMB	4	1.37	19.63	57.5	84.2	5.5
CIMB	5	1.3	19.73	59.5	88.4	4.7
CIMB	6	0.81	19.84	61.5	93	6
CIMB	7	0.66	19.95	64.8	92.9	5.09
CIMB	8	0.77	20.00	59.2	95.6	4.45
CIMB	9	0.93	20.04	57.5	90.8	5.81
CIMB	10	1.09	20.10	54.6	91.2	4.84
CIMB	11	0.8	20.17	60.7	92	4.44
PBB	1	1.23	19.20	36.1	79.2	-1.5
PBB	2	1.4	19.24	34.2	87.6	7.4
PBB	3	1.56	19.34	34.9	87.8	5.3
PBB	4	1.47	19.43	36	87.1	5.5
PBB	5	1.41	19.54	35.8	87.5	4.7
PBB	6	1.4	19.66	35	88	6
PBB	7	1.44	19.71	35.3	90.3	5.09
PBB	8	1.42	19.76	36.9	94.3	4.45
PBB	9	1.43	19.80	36.7	93.6	5.81
PBB	10	1.39	19.86	37.8	95	4.84
PBB	11	1.31	19.89	38.8	93	4.44
RHB	1	1.1	18.56	41.6	89.4	-1.5
RHB	2	1.17	18.68	42.7	90.8	7.4
RHB	3	1.2	18.84	45.2	90.3	5.3
RHB	4	1.05	19.06	47.5	86.6	5.5
RHB	5	0.97	19.07	51	77.3	4.7
RHB	6	1.01	19.21	53.1	78.8	6
RHB	7	0.75	19.24	59.2	83.7	5.09

RHB	8	0.73	19.28	55.3	88.9	4.45
RHB	9	0.84	19.25	53.3	93.8	5.81
RHB	10	0.98	19.31	49.3	94.4	4.84
RHB	11	1.01	19.37	47.8	92.5	4.44