THE RELATIONSHIP BETWEEN FOREIGN DIRECT INVESTMENT, EXCHANGE RATES AND ECONOMIC GROWTH IN MALAYSIA FROM 1989 - 2019

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ABSTRACT

This study investigate the long-run and short-run relationship between Foreign Direct Investment (FDI), Exchange Rate (EXCR) with Economic Growth (GDP) in Malaysia from 1989 to 2019. The data used in this studies are annually data which collected from the Official Website of World Bank. This study applied Autoregressive Distributed Lag (ARDL) Model by using EVIEW Software to estimates the relationship between the studied variable. The result of this study indicated that there is positive and significant relationship between FDI and GDP in the long-run and the short-run. Meanwhile, EXCR shows that there is negative but significant relationship with the GDP in the long-run but in the short-run, EXCR shows a positive and significant relationship with the Malaysia GDP. In conclusion, this study suggest that the increased in FDI and EXCR will give a significant change to the Malaysia GDP.

Keywords: Economic Growth, Foreign Direct Investment, Exchange Rate, ARDL, Malaysia.

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ABSTRAK

Kajian ini dijalankan adalah untuk mengkaji hubungan jangka panjang dan jangka pendek antara pelaburan langsung asing, kadar pertukaran dengan pertumbuhan ekonomi di Malaysia dari tahun 1989 sehingga 2019. Data yang digunakan didalam kajian ini adalah data dalam bentuk tahunan yang diperolehi daripada Laman Web Rasmi Bank Dunia. Kajian ini juga telah mengaplikasikan model Autoregressive Distributed Lag (ARDL) daripada perisian E-Views untuk mengetahui hubungan antara pemboleh ubah yang dikaji. Hasil daripada kajian ini mendapati bahawa terdapat hubungan yang positif dan signifikan antara pelaburan langsung asing dengan pertumbuhan ekonomi dalam jangka masa panjang dan jangka masa pendek. Disamping itu, kadar pertukaran menunjukkan hubungan yang negatif tetapi signifikan terhadap pertumbuhan ekonomi di Malaysia dalam jangka masa panjang. Sebaliknya, dalam jangka masa pendek, kadar pertukaran adalah berhubungan positif and signifikan terhadap pertumbuhan ekonomi Malaysia. Kesimpulannya, kajian ini menyatakan bahawa peningkatan dalam pelaburan langsung asing, dan kadar pertukaran akan menyebabkan berlakunya perubahan yang signifikan terhadap pertumbuhan ekonomi di Malaysia.

Kata Kunci: Pertumbuhan Ekonomi, Pelaburan Langsung Asing, Kadar Pertukaran, ARDL, Malaysia.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

GDP	Gross Domestic Product @ Economic Growth
FDI	Foreign Direct Investment
EXCR	Exchange Rate
ADF	Augmented Dickey Fuller
VAR	Vector Autoregression
ARDL	Autoregressive Distributed Lag
ECM	Error Correction Model

CHAPTER 1

INTRODUCTION

1.0 Introduction

Throughout the last few decades, economic growth drivers have received increased attention across both theoretical and practical study (Arvanitidis et al., 2007). Economic growth is a priority for every country's macroeconomic policy. Besides that, Growth Domestic Product or GDP is a metric or key to economic growth. The economic growth in every country can be measured by using GDP or Gross National Product (GNP). GDP estimates the monetary worth of final products and services, which mean products and services purchased by the ultimate user which are generated in the country over a certain time period.

Total of all production created inside a country's borders are refers to gross domestic product. GDP is made up of commodities and services generated for market sale as well as certain non-market output, such as defense or education services which are provided by the government. The significant of GDP is that it will provide information about the economic performance. When the country experiences an expansion in real GDP, it means that the country's economy is performing well. Department for International Development, (2008) stated that Economic growth represents the most potent tool in order to help raise living standards as well as decrease poverty in emerging economies. Growth also has a potential in order to create many loaves of prosperity and opportunity. A strong development and job prospect will enhance the society awareness about the important of education. This might result in the formation of a powerful and increasing number of entrepreneurs who should put pressure on the government to improve governance. All of this might result in creating a strong economic growth which could support human development, and indirectly promote economic growth.

Generally speaking, there are several factors that determine economic growth, which are enhanced in labour inputs like workers or working hours, accumulation of capital stock and technological advancement. Aside from those stated factors, there are many other factors that also determine the nation's economic expansion which Foreign Direct Investment (FDI), and Exchange Rate (EXCR). However, there are many discussions happening in order to clarify the relationship between those macroeconomic variables in relation to economic growth.

Foreign Direct Investment is very important because it may stimulate and sustain economic growth in both recipient and investing countries, usually developing countries have supported FDI as a method of funding new infrastructures and creating jobs for local employees. OECD, (2002) stated that, FDI promotes technological spillovers, international trade integration, the creation of a more competitive business environment, assisting human capital formation, and company development. All of these factors cause the acceleration of economic progress. Growth is the most powerful weapon for eliminating poverty throughout emerging nations.

Meanwhile, Mun et al., (2009) stated implies FDI has substantial effect to Malaysian economics. Study demonstrates connection between FDI and Malaysia's economic expansion. Samborskyi et al (2020) study on the effect of FDI on GDP, there evidence says FDI has beneficial impact on economic growth. Positive effect of FDI on economic growth can reduced because negative externalities associated with foreign investment, such as displacement of domestic investment and capital repatriation, the direct benefit of FDI can be decreased.

Meanwhile, exchange rates are one of the important drivers of a country's relative degree of economic health. This is because a stronger currency will make import less costly and export more expensive in overseas markets. In November 2022, the Malaysian Ringgit against the United States Dollar will be 4.57 ringgit Malaysia equal to 1 United States Dollar. Based on research about connection between exchange rate and GDP in Malaysia during the period between 1970 until 2011 implemented ARDL method shows that the effect of exchange rate in long run equation was found to be negative. Meanwhile in a short-run, exchange rates are found to be positive and significant but it happens to have slightly minimal in percentage effect (Asid et al., 2014).

Exchange rate on economics expansion in different countries will also give a different result. For example, the study made by Khan (2021) about the impact of exchange rate on economic growth of Bangladesh using The Ordinary Least Squares method from 1990 to 2020 in finding linkages between tested variables. Result shows, exchange rates has substantial effect on the Bangladesh economics development.

Following introduction part for chapter 1, this next subsection will explain the background of this research, problem statements which are the significant reason why this study is being conducted, the objective of this research, the research question, and also the research hypothesis to be tested. Besides that, there is also a part where researchers will elaborate about the dependent and independent variable in more detail by referring to previous literature and articles in the conceptual framework (also the method used in the studies) and variable operational. In addition, the scope of study, limitation and significance of the study will also be elaborate and discussed. Lastly, the conclusion part where all of the information will be concluded in this chapter.

1.1 Research Background

Based on the preceding section's discussion of economic growth's reliance on foreign direct investment, and exchange rate. It is unclear whether variables were significant in influencing economic growth, whether the link between FDI, EXCR is positive or negative. Besides that, whether it is influencing economic growth in the short or long run. Following explanation can assist in summarize the issues regarding the variable utilized in this study.

1.1.1 Foreign Direct Investment and Economic Growth in Malaysia

FDI may stimulate also sustain in both the recipient and investing countries economics expansion. On the other hand, the developing countries have supported FDI as a method of funding new infrastructure and creating jobs for local employees.

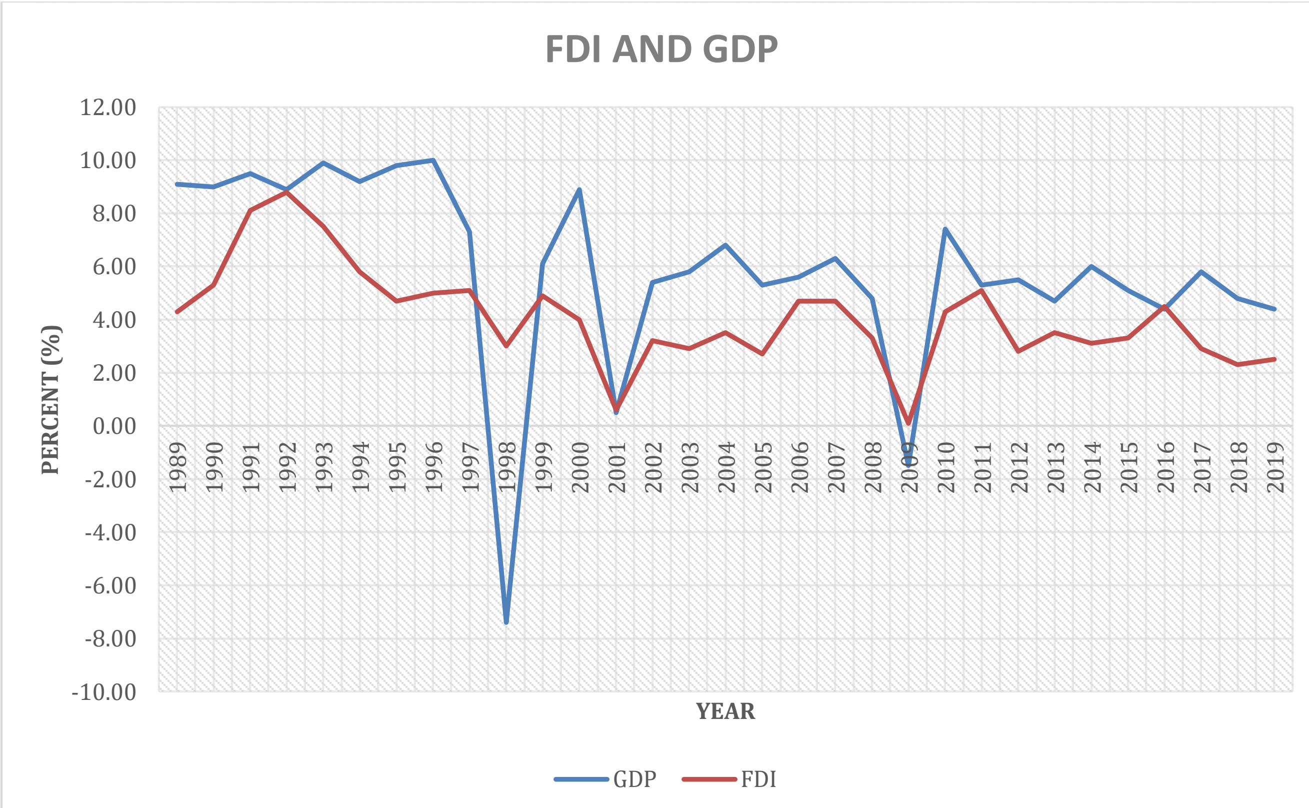

Figure 1.1: Foreign Direct Investment and Gross Domestic Product

Figure 1.1 shows the connection between foreign direct investment and economic expansion in Malaysia from 1989 to 2019. Many things may be used to boost economic growth. One of the causes is increased export. Foreign direct investment is thought to have a good link with export. The greater foreign direct investment will contribute to the increase in exports and hence economic growth (Shaari et al., 2012).

The present crisis has shown to have an impact on emerging Asia through a reduction in trade and FDI inflows. Malaysia known as the country that apply open economic which involve in export and import activities. For country that rely on trading activities, financial crisis will give significantly influence the growth of the nation's economy. Which is trading partner decrease.

Figure 1.1, the financial crisis that happen in 1997 to 1998 was not much affected Malaysia foreign direct investment due to wisdom of government in handling situation which is introducing good investment incentives, introduction of free zones trade, provision of exports incentives alongside the open policy and lastly an effective financial system. Meanwhile, the financial crisis that happen in 2008 are also directly affected Malaysian GDP and FDI in 2009.

Based on Figure 1.1, the gross domestic product are decreased from 6.30 percent in 2007 to 4.70 percent in 2008 and getting worst in 2009 at -1.50 percent. Same thing happen to Malaysian foreign direct investment, in 2007, Malaysian FDI recorded 4.70 percent. Meanwhile, in 2008, FDI decreased to 3.30 percent and getting worst in 2009 which are recorded only 0.10 percent.

1.1.2 Exchange Rate and Economic Growth in Malaysia

Local currency price for one unit of foreign exchange is defined as exchange rate. Changes in price of foreign exchange are referred to as currency depreciation or appreciation under flexible exchange rates. When a currency loses value compared towards other currency, it depreciates. The entire worth of goods and services produced and offered in nation during a year is GDP. One of several macroeconomic factors that could affect GDP is the exchange rate.

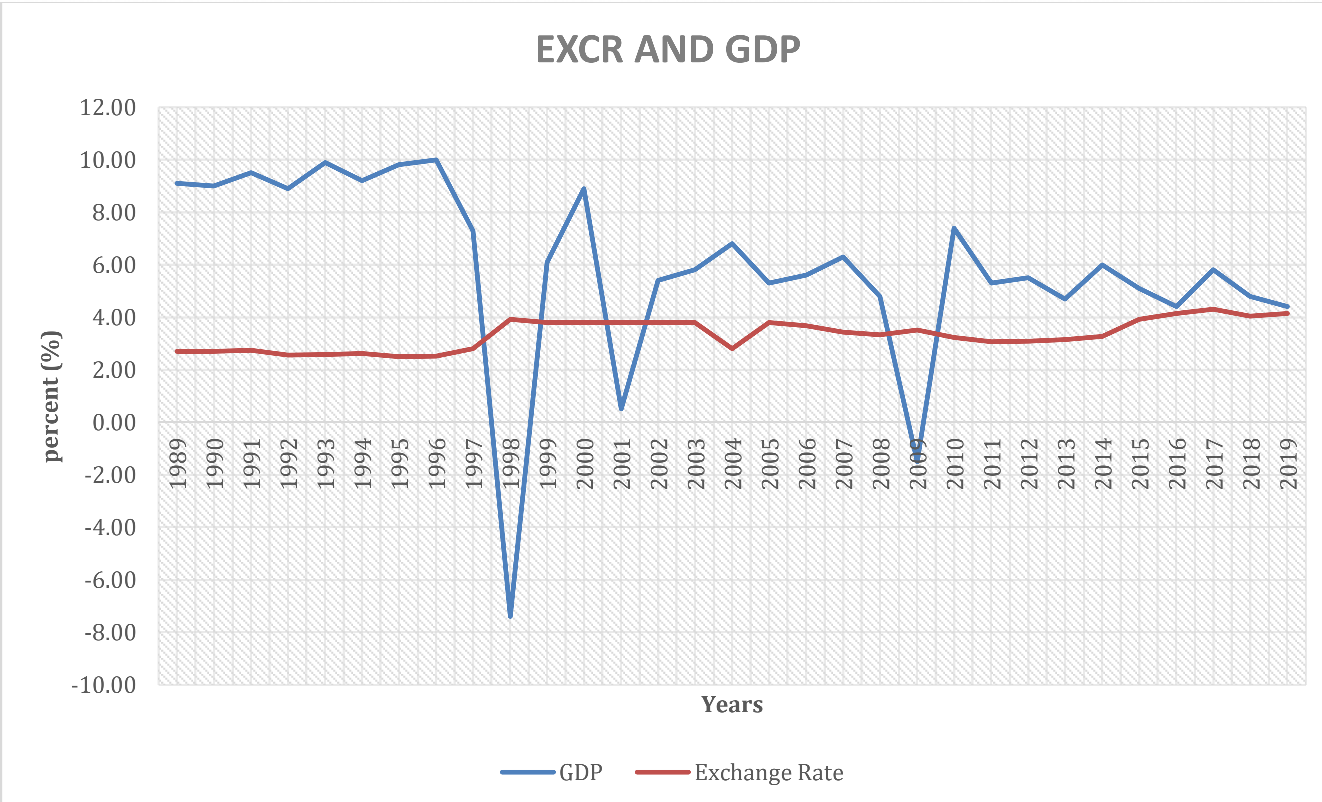

Figure 1.2: Exchange Rate and Gross Domestic Product

Figure 1.2 shows the relationship between exchange rate and gross domestic product in Malaysia from 1989 to 2019. The research on the linkage between gross domestic product and exchange rate generated diverse results, which is it might be positive, negative or there is no relationship at all. However, most research agreed that these two variable have a positive connection (Faridah et al., 2018). Malaysia is the country that practice open economy that rich with many resources that contribute to the country rapid growth and development. Malaysia's currency is known as the Malaysian Ringgit (RM). The exchange rate is seen as a tool that can increase export volume while decreasing import volume (Nguyen et al., 2021).

The exchange rate system is frequently linked to economic uncertainty. For example, during the Asian Financial Crisis, Malaysia gross domestic product fell from 100.8 Billion US

Dollar in 1996 to 72.2 billion US Dollar in 1998 (Mohamed et al., 2021). Besides that, a speculative attack in the foreign exchange market was one of the elements that led to the crisis harm Malaysia economy, this scenario caused the exchange rate to drop from RM2.42 to 1 US Dollar which drop about 50 percent, and reaching a high of RM 4.88 to 1 US Dollar on 1998 (Ariff & Yanti, 1999).

Besides that, the impact of financial crises on the Malaysian economy can be seen in 2008 and 2009 based on the value of GDP and Exchange Rate which shows in the Figure 1.2. In 2008, exchange rate are 3.34, due to financial crisis the value of exchange rate depreciate to 3.52 in 2009. Meanwhile, same thing happen for GDP, in 2008 the Malaysian GDP are 4.80 percent drastically depreciate to (-1.50 percent) in 2009 due to financial crisis that occur in 2008.

1.2 Problem Statement

FDI also EXCR has been an important source of GDP growth for Malaysia. For many years, economic growth has been researched and it is crucial for policymakers to comprehend GDP growth since it has the potential to have a big impact on the economy. There are numerous studies that have been conducted by researchers to investigate this issue.

Besides that, the selection of the variables influencing economic growth is still unclear. To find the specific factors that are potential enough to explain economic growth (GDP growth) is challenging yet though. This could be as a result of the data accessibility, various time periods, various country features or other factors.

Hence, due to this related problem, the question will be addressed are: 1) Does relationship exist between foreign direct investment, exchange rate and economic growth in the long-run? 2) Does relationship exist between FDI, EXCR and economic growth in short run? Goal of this study are finding the short and long-run relationship based on variables which influence Malaysia economic expansion. This study will highlight the main concern relating to FDI, and EXCR measurement on Malaysia GDP based on the data that has been gathered and identified.

Nevertheless, this study is different from other study made by previous researcher which more focus on effect of export, import and exchange rate on economics expansion and also different method used in order to test the variables related to the research topic. Therefore, the focus of this research is different from other empirical studies, which is macroeconomic variable (FDI, and EXCR) and its impact on economic growth in Malaysia from 1989 to 2019 by using Autoregressive Distributed Lag (ARDL) Model which introduce by Pesaran and Shin (1998).

Afterward, this study are specifically aim to 1) Investigate long-run relationship between dependent and independent variable ; 2) Investigate short-run relationship between dependent and independent variable: 3) To examine the importance of macroeconomic variable in development. Finally, this research would be beneficial to other academics and lead to advancement that will boost economic growth via foreign direct investment, and exchange rates. Research made also examines whether exchange rate and foreign direct investment have a positive or negative impact to Malaysia economic growth.

1.3 Research Objectives

Aim of research are finding how economic growth is influenced by the independent variables by implement ARDL, while the specific objectives are:

1. To investigate the long-run relationship between foreign direct investment, exchange rate and economic growth

2. To investigate the short-run relationship between foreign direct investment, exchange rate and economic growth

1.4 Research Questions

There are several research questions to fulfill the objectives of this study. The research questions that will be carried out is as follow:

1. Does relationship exist between foreign direct investment, exchange rate and economic growth in the long-run?

2. Does relationship exist between foreign direct investment, exchange rate and economic growth in the short-run?

1.5 Research Hypothesis

According to the research objectives, several hypotheses have been developed to test whether selected macroeconomic variables which is FDI, EXCR will give a substantial impact on Malaysian GDP. The hypothesis are as below:

H_1 : There is significant relationship between foreign direct investment and economic growth in the long-run.

H_2 : There is a significant relationship between foreign direct investment and economic growth in the short-run.

H_3 : There is significant relationship between exchange rate and economic growth in the long-run.

H_4 : There is a significant relationship between exchange rate and economic growth in the short-run.

1.6 Conceptual Framework

Focus of this section is to elaborate the relationship between selected macroeconomic variables and economic growth. There are two main macroeconomic variables that will be focused on which is FDI and EXCR. Data used for this research are annually data. Meanwhile, the framework of methodology of the research also will be elaborate.

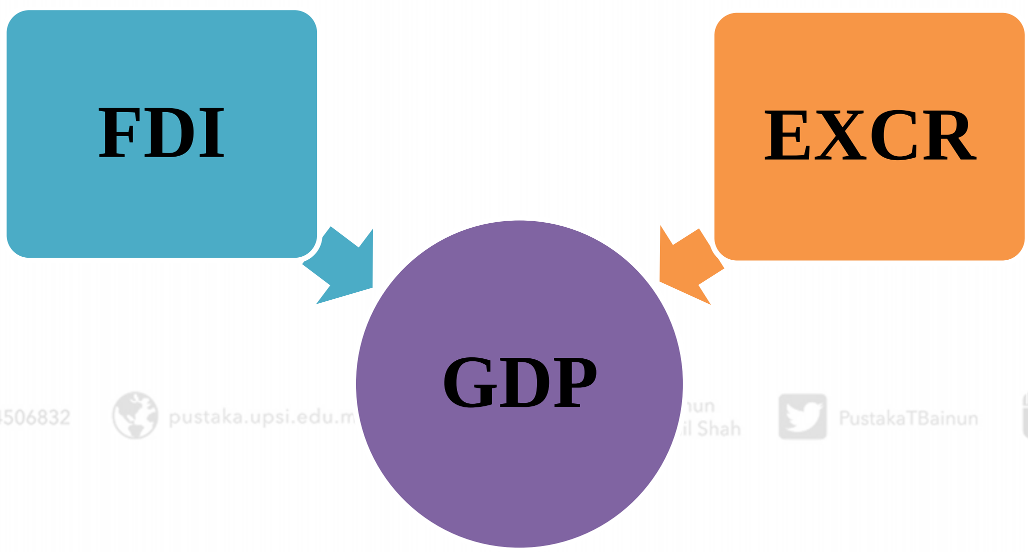

Figure 1.3: The relationship between dependent variable and independent variables

Based on figure 1.3, the dependent variable is Gross Domestic Product (GDP), whereas the independent variables are Foreign Direct Investment (FDI), and Exchange Rate (EXCR). All of the variables will be used in order to investigate the relationship between the macroeconomic variable and economic growth in Malaysia from 1989 to 2019.

The arrows in figure 1.3 clearly suggest that they are linked between the variables. Previous studies have found a link between the variables. For example the study made by (Asid et al., 2014; Rahmatullah et al., 2020) the impact of FDI and Exchange Rate on economic growth in Malaysia. (Karimi & Yusop, 2009) FDI and Economic Growth in Malaysia.

Outcome of this research may be classified into two categories: positive and negative relationship whether in the long-run or in the short-run. The Autoregressive Distributed Lag (ARDL) Model was applied in this study in finding relationship between the variables in the analysis.

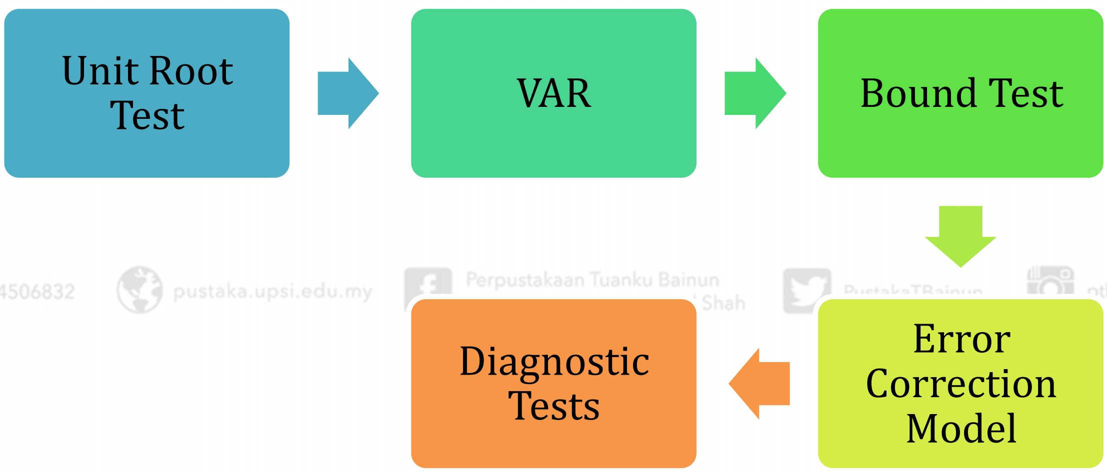

Figure 1.4: Methodology Framework

Figure 1.4 shows the Methodology Framework that will be uses in this study, prior to performing ARDL, each data must undergo a unit root test to clarify the data whether it is not stationary or stationary at the level form and first difference. After that, next analyses will be test, such as VAR for optimal lag selection, long run cointegration estimate through Bound Test, Short-run relationship through ECM, and Diagnostic test, to be successful.

1.7 Variables Operational

Foreign Direct Investment

FDI refers to foreign entity makes an investment by purchasing a majority stake in a company from another country. During financial crises, Foreign Direct Investment (FDI) has proven to be resilient (Loungani & Assaf, 2001). The theoretical explorations reveal that hosted countries economic development is significantly influenced by FDI both in direct and indirect ways.

According to Mahembe & Odhiambo (2014), FDI will influence GDP through two approaches. First, Foreign direct investment could encourage the adoption of new technologies in the manufacturing process via technological spillovers. Second, Foreign direct investment can encourage knowledge transfer through labour and skill gain, as well as the introduction of new management approaches.

Exchange Rate

The exchange rate is viewed as tool in increasing export volume and decreasing imports. The exchange rate at which one currency trades against another in the foreign exchange market, such as the Malaysian Ringgit (RM) against the United States Dollar (USD). It can be expressed as the average over a specific time period or as the rate at the end of the time period used to compute the real value of money in a country (Nguyen et al., 2021). If the real exchange rate rises, local products become uneconomical since they are more expensive than commodities created and sold abroad (Hassan et al,. 2022).

Assuming that all other variables stay constant, enhance in domestic exchange rate might reduce effectiveness and eventually export volume. Furthermore, the increased exchange rate will cause a shift in profitability for exporters. Currency undervaluation has a stronger and more robust influence on growth in developing economies (Rapetti et al., 2012). The real money value of a country can be determined through the exchange rate.

1.8 Research Scope

This research focuses on the relationship between FDI, EXCR and Malaysia GDP in 1989 until 2019. Data used for this research was annual data which is 30 years in order to make sure this research is able to be conducted. Besides that, this research is based on Malaysian countries in order to specifically understand the Malaysian economic condition and situation related to the years and the main focus of this study.

The macroeconomic variable or independent variable used in this research is FDI, and EXCR used to examine its impact on economic growth or GDP (dependent variable) in Malaysia. Besides that, this research is conducted to investigate link between dependent variable and independent variables in short and long-run. So, the stated macroeconomic variable will be tested using the Autoregressive Distributed Lag (ARDL) Model. Additionally, this research also will examine the importance of macroeconomic variables in development.

1.9 Limitation of Study

This study happens to have several challenges and limitation. The first challenge researchers need to face is in collecting observed data for chosen variables which is FDI, and EXCR also GDP from the years of 1989 to 2019 by using annual data.

In the process of find all needed data for this research, researchers need to spend a lot of time in order to collect the data. For example, the GDP data for Malaysia found online are mostly stated in the United States Dollar, so it happens to be a little bit complicated for the researcher to find and convert the data. Meanwhile, data for FDI, and EXCR are collected in percentage values. The data collection take a lot of time because researcher need to find the best data to conduct the research.

In a lot of discussion aspects of this study, researchers find some problems in the case of finding article journals as references. This study is observing a large number of previous article journals which are related to the research topic which is the relationship between macroeconomic variables like foreign direct investment, and exchange rate and economic growth or gross domestic product in Malaysia.

Despite the fact that certain article journals are free to download. There are also some article journals that are not available for free. In order to access those articles it is required to make payment so it is a little bit costly and becomes a limitation in this study.

1.10 Significant Of Study

This research will give information about the relationship between macroeconomic variable which is foreign direct investment, exchange rate and the economic growth in Malaysia. GDP growth has always been considered as a contemporary subject that many scholars have addressed. Inconsistent GDP per capita growth within a country will enhance the prevalence of poverty and also impede progress in health, crime, education and also economic growth (Nurul et al., 2017).

For Malaysia, economic growth is very important because Malaysia was a developing country that was aiming to become an advanced country. In relation, foreign direct investment in Malaysia was among the significant activities that generated value to Malaysia economically. The linkage between FDI and economic expansion has attracted a lot attention over the years (Mahembe & Odhiambo, 2014). FDI inflows are the most likely to contribute significantly to economic growth.

FDI has been identified to be significant contributor that drives Malaysia to improve its economic record. The policy measures, which involve the introduction of the Investment Incentives Act in 1968, the development of free trade zones in the early 1970 and also the granting of export incentives in the 1980, all of these contributed to a spike in FDI in the late 1980. Foreign Direct Investment has increased greatly since the 1980 (Moran et al., 2005).

Under the promotion of Investment Act 1986. Government has introduced more liberal incentives in order to encourage a bigger inflow of FDI and permitting a greater percentage of foreign equity participation in enterprises. After 1987, the result from the introduction of intensives shows that a large inflow of FDI was recorded (surged at a 38.7 percent annual average rate between 1986 and 1996) (Karimi & Yusop, 2009).

This study is also important to investigate the relationship between those macroeconomic variables that will give a crucial impact on economic growth. Aside Foreign Direct Investment, Exchange rate also might impact economic growth. Currency undervaluation has a stronger and more robust influence on growth in developing economies (Rapetti et al., 2012). The real money value of a country can be determined through the exchange rate.

Malaysia is a country that implements an open economy. There are several economic activities that might have a significant impact on the exchange rate. For example, trade activities which are export activities and import activities. The currency exchange rate can be influenced by the balance of trade which shows more or lower the demand for a currency. When a country's products are in great demand it shows that exports are more than import which means currency receives high demand and its goods for economic growth and development. Meanwhile, a country's currency will have lower demand if the import activities are more than its country export activities which is bad for economic growth.

This research is important because it investigates the relationship between FDI, EXCR, and on economic growth. Result of this test important to policymakers because all these macroeconomic variables play a vital role in a country's economic growth. Thus, this study will benefit the rulers of the countries in making strategic planning for economic growth and development.

1.11 Conclusion

This study investigates the macroeconomic variable (foreign direct investment, exchange rate and inflation rate) and its impact on economic growth (gross domestic product) in Malaysia from 1989 to 2019. All of these macroeconomic variables play a vital role in Malaysia economic growth. Foreign direct investment is important for economic growth because foreign direct investment may help a country's economic development by creating a more favourable environment for businesses, the local community, investors and also the economy.

Besides, when the country is involved in foreign direct investment activities, as the investor establishes a new business in Malaysia, it will provide new employment and other benefits. From these, it can lead to a rise in income and spending power for locals, and lastly may result in overall boost for targeted economies. Moreover, Exchange rate may also impact economic growth. This because the exchange rate has a significant impact on a country's trading performance, volatility and currency values may impact the export and import activities. So, this research is very important because from this research will reveal a foreign direct investment, exchange rate and its impact on economic growth and development in Malaysia.