

**MACROECONOMICS VARIABLES AND BUSINESS  
ENVIRONMENT INFLUENCE THE FOREIGN DIRECT  
INVESTMENT (FDI) INFLOWS IN MALAYSIA**

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## ABSTRACT

This study examines the relationship between macroeconomics variables, business environment variables and FDI inflow in Malaysia. The data is collected for the period of 21 years from 1991-2012 from World Bank data base for FDI inflow and seven variable, including macroeconomics variables (GPD growth rate, exchange rate, export, imports and inflation), business environment variables (corruption index and political stability). The data has been analysed by using Eviews 6.0 and SPSS 19.0. Descriptive analysis, Pearson's Correlation analysis and Ordinary Least Square (OLS) were used as for inferential statistics. This study used the Augmented Dickey Fuller (ADF) test to check the stationary of the data using Eviews and Pearson's correlation using SPSS. The finding of this study revealed that macro-economic variable such as import, export and the exchange rate has a significant relationship with the FDI inflow but economic growth found insignificant relationship with FDI inflow. It also has been found that business environment variables, corruption control and political stability have significant relationship with FDI inflow, but inflation rate has an insignificant relationship with FDI inflow. The findings from this study suggested that for macroeconomics and environment variables such as import, export, exchange rate, corruption control and political stability are very important in order to influence FDI inflows. Political stability and corruption control are the most significant variables for FDI inflow in Malaysia. It is further suggested that these variables may keep in consideration in the future course of action. This study also suggests the policy recommendations for foster the economic activities in the Malaysian economy by attracting FDI and rising its inflow.

**Keywords:** Foreign Direct Investment (FDI), Macroeconomics Variables, Business Environment, Malaysia

## ABSTRAK

Kajian ini dijalankan bertujuan untuk mengenalpasti hubungan yang wujud diantara pemboleh ubah ekonomi makro, pemboleh ubah persekitaran perniagaan serta Aliran Pelaburan Asing ke Malaysia. Kajian dijalankan berdasarkan hasil pengumpulan data untuk tempoh 22 tahun mulai dari tahun 1991 sehingga tahun 2012 daripada database Bank Dunia untuk Aliran Langsung Asing dan ini menunjukkan bahawa tujuh daripada pemboleh ubah yang dikaji iaitu termasuk pemboleh ubah ekonomi makro seperti Kadar Pertumbuhan Keluaran Dalam Negara Kasar(KDNK), Kadar Tukaran, Impot, Ekspot serta Kadar Inflasi manakala pemboleh ubah persekitaran perniagaan seperti Indeks Kawalan Rasuah serta Kestabilan politik memberi impak kepada Aliran Langsung Asing. Data yang diperolehi dianalisa menggunakan perisian EViews serta pakej perisian statistik SPSS 19.0. Manakala untuk Analisis Deskriptif, Analisis Korelasi Pearson serta Analisis Ordinary Least Square(OLS) digunapakai sebagai statistic inferensi. Kajian ini juga menggunakan Ujian Augmented Dickey Fuller(ADF) untuk menguji data yang *pegun* menggunakan perisian EViews dan Analisis Korelasi Pearson menggunakan pakej perisian statistik SPSS. Oleh itu, penemuan ini dengan jelas membuktikan bahawa pemboleh ubah ekonomi makro seperti impot, ekspot serta kadar tukaran merupakan penentu yang signifikan bagi Aliran Langsung Asing manakala pertumbuhan ekonomi tidak menunjukkan hubungan yang signifikan dengan Aliran Langsung Asing. Selain daripada itu, pemboleh ubah persekitaran perniagaan iaitu indeks kawalan rasuah dan kestabilan politik menunjukkan hubungan yang signifikan dengan Aliran Langsung Asing manakala kadar inflasi tidak menunjukkan hubungan yang signifikan dengan Aliran Langsung Asing. Oleh yang demikian, hasil dapatan daripada kajian mencadangkan bahawa pemboleh ubah ekonomi makro serta pemboleh ubah persekitaran perniagaan yang terdiri daripada impot, ekspot, kadar tukaran, indeks kawalan rasuah dan kestabilan politik amat penting dalam menentukan hala tuju pertumbuhan ekonomi melalui Aliran Langsung Asing bagi sesebuah negara termasuk Malaysia. Bagaimanapun, kestabilan politik serta indeks kawalan rasuah merupakan antara yang paling signifikan untuk Aliran Langsung Asing di Malaysia. Oleh yang demikian dengan jelas menunjukkan bahawa pemboleh ubah tersebut perlu diberi perhatian yang sewajarnya untuk memastikan kelangsungan Aliran Langsung Asing di masa akan datang. Selain itu, kajian ini juga membuat beberapa kesimpulan serta beberapa cadangan polisi yang wajar demi untuk menggalakan pertumbuhan kadar aktiviti ekonomi Negara dengan peningkatan aliran masuk pelaburan langsung asing ke dalam Malaysia khususnya.

**Katakunci:** Aliran Langsung Asing, Pemboleh ubah Ekonomi Makro, Pemboleh ubah Persekitaran Perniagaan, Malaysia

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Background of the Study**

For many years, Foreign Direct Investment (FDI) plays an important role as a source of financial funding for developing countries including the Asian countries like Malaysia. In order to sustain economic and development growth, they have increasingly turned to FDI as a source of capital. FDI usually involves its participation in management, joint ventures and also in terms of transfer of technologies and expertise. More specifically, FDI act as an agent to create mechanism to help one country to get productive assets from other countries through cross-border corporate governance. As mentioned by Wong (2005), FDI is different from the other major type of foreign investment where mainly motivated by a long term profit prospect in production activities that are directly controlled by the investors. However, in some other developing countries including Malaysia, FDI can be an important factor in order to support and improve the economic growth of the host country. Therefore, FDI provides the way forward for technological promotion and benefit the domestic industries. They are significant effect in different sectors including increasing productions, help in upgrading the living standards, promote export, create employment opportunities, poverty alleviation and inflation rate in assisting the economy to achieve economic growth.

According to the study by Borensztein, De Gregorio and Lee (1998), any host country that successful to attract the inflows of FDI. That country will get access to the new market, become efficient in utilizing the available resources, and observe improvement in its skills and knowledge. FDI also help in development of

infrastructure and provision of development expenditure and very useful to remove budgetary deficit. Moreover it helps the country to enjoy the status of economies of scales.

Foreign direct investment (FDI) always demanded by the host countries, more necessarily important for the developing and emerging markets. Therefore, as reported during the Asian debt crisis of 1997, FDI is seems to be more important source of capital than portfolio investment (Lipsey, 2001). FDI is also said to have important spill over effects, such as transfer of technology and managerial expertise (Meyer and Sinani, 2009; Lipsey, 2001). Therefore, many emerging countries including those in the Asian Region including Malaysia have taken steps to encourage FDI in order to enhance economics growth in their countries. In recent years, FDI is also, been considered as the most important source of external resource for industrial expansion and growth of real income sought by the developing countries. In fact, the ensuing benefits of the FDI have been widely recognized as an expansion of the economic growth in the developing nations Khan (2007). According to Alfaro, Chanda, Kalemli-Ozcan and Sayek (2004), the contribution of foreign direct investment in the host country's national economy assumed to exert its positive influence in adding to the employment opportunities, enhancing the managerial productivity of capital in the industrial sector of the country, the rise in foreign trade and economic growth with increased dose of technology transfer.

As mentioned by most researcher Alfaro et al. (2004);Khan (2007); Meyer and Sinani (2009); Lipsey (2001), that the benefits of the FDI of the host country's economy further refer to optimise the use of available raw materials, inject the novel method in management and marketing approaches. Besides all, it provides access to

modern technologies, enhances the human capital of the developing country through job training and Human Resource Management (HRM) strategy. Besides, the most significant of the FDI flows in both developed and developing countries are widely recognized in most of economics literature. In the industrialization process, most of the developing countries have tended to enhance their capital formation by seeking the help of foreign capital through FDI. Therefore, many famous researchers have analysed the role of FDI in economic growth in several countries in order to examine the relation between investment and growth and they found out that FDI is presumed to be a crucial source for soliciting capital, advanced technology, managerial skills, improved marketing know-how and output for non-traditional exports. The link between FDI and trade moves through two main channels in the host countries. First, the countries with high degree of openness are obviously tended to be attracting more FDI inflows. Here, technically, the degree of openness is measured in terms of the trade GDP ratio. Secondly, the FDI flows can influence trade flows through technology transfer and expansion of industrial output in export sector (Chowdhury & Mavrotas, 2006)

## **1.2 Malaysia and Foreign Direct Investment (FDI)**

In general, Malaysia is ranked among the fast growing economies in terms of economic development in South East Asian with an above average of Gross National Product (GNP). Therefore, Malaysia is now becoming one of the most open economies in the world with a policy of mixed economies where the country attracts FDI into the country in order to drive the economy and to enhance the growth. Throughout all the developments, Malaysia has very good integration with the global

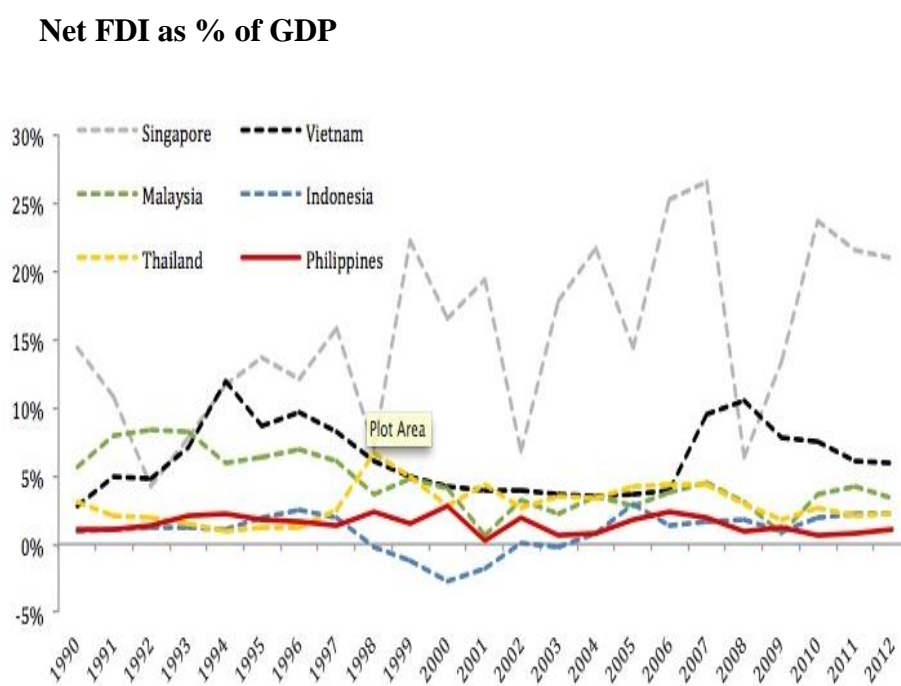
economy and international financial system, which not only bring significant changes in the amount of trade activities but also cause heavy FDI.

Malaysia has received the FDI, Which has been a major contributor towards the country economic development from the last century. Base on World Investment Report (2008) stated that Malaysia has very fast grown economies in the world and has been listed as top ten destinations for FDI in 2008. According to the Malaysian International Trade and Industry (MITI) minister Datuk Seri Mustapha Mohamed during the United Nation Conference on Trade and Development mentioned that there is an increase in FDI favourably with the increased in global FDI of 11%, where 6.2% goes into developing countries another 2.4% in South East Asia. He also said that the inflow of FDI was mainly contributed to manufacturing sector (37.6%), service (28.8%) as well as mining (28.7%) as sub sector. He also added that the major contributors include financial and insurance sectors, information and communication which contributed 55% of the investment in services sector in 2013 (The Star, 2012).

For the past two decade, Malaysia was receiving a lot FDI. FDI stock in Malaysia starts to grow up slowly by 1970s. FDI inflows had increased almost twenty-fold during 1970s to 1990s, from \$94 million dollar in 1970s to \$2.6 billion dollar by 1990s, although there was some fluctuation between the years. Even though the FDI was increased over the year, however, since the early of 1990s, there have been several periods of slowdown. In 1993, FDI drop drastically dropped drastically due to a slowdown in investments from two main sources of investments for Malaysia - Japan and Taiwan. One of the main reasons for this slowdown is the rise in wage rates in Malaysia relative to other Asian countries (such as China, Vietnam and Indonesia). The total FDI flows in Malaysia was peaked at 1996, when it achieve \$7.3 billion dollar. The financial crisis of 1997 that affected most of the Southeast Asia

also serves to reduce FDI into Malaysia. Since the early of 2000s, the FDI flows in Malaysia tend to inconsistent and fluctuate randomly, however it also achieve an average inflows of US\$ 3billion per year. The current average FDI inflow is 2010-2013 RM5.9 billion. With regards to the share of FDI inflow throughout the world, Malaysia has share of 0.65, 0.74 and 0.77% in the years 2010, 2011 and 2012 respectively. While, in Asian countries Malaysia have share of 2.29, 2.72 and 3.99% in 2010, 2011 and 2012 accordingly. However, in ASEAN countries Malaysia have share of 9.89, 10.43 and 10.65% for the year 2010, 2011 and 2012 in order. Moreover, in statistics of FDI inflow, Malaysia ranked 3rd among South-East Asian countries and 8th among Asian countries for the year 2013 (WTO, 2013).As per the latest figures the Malaysian current FDI is relatively low as compare to other native counties. The figure 1.0 indicates that other countries are managing to attract FDI, in a more robust manner than Malaysia.

Figure 1.0  
*FDI Inflows during the period of 1991-2012*



**Figure 1.1**Source: UNTCD, 2012

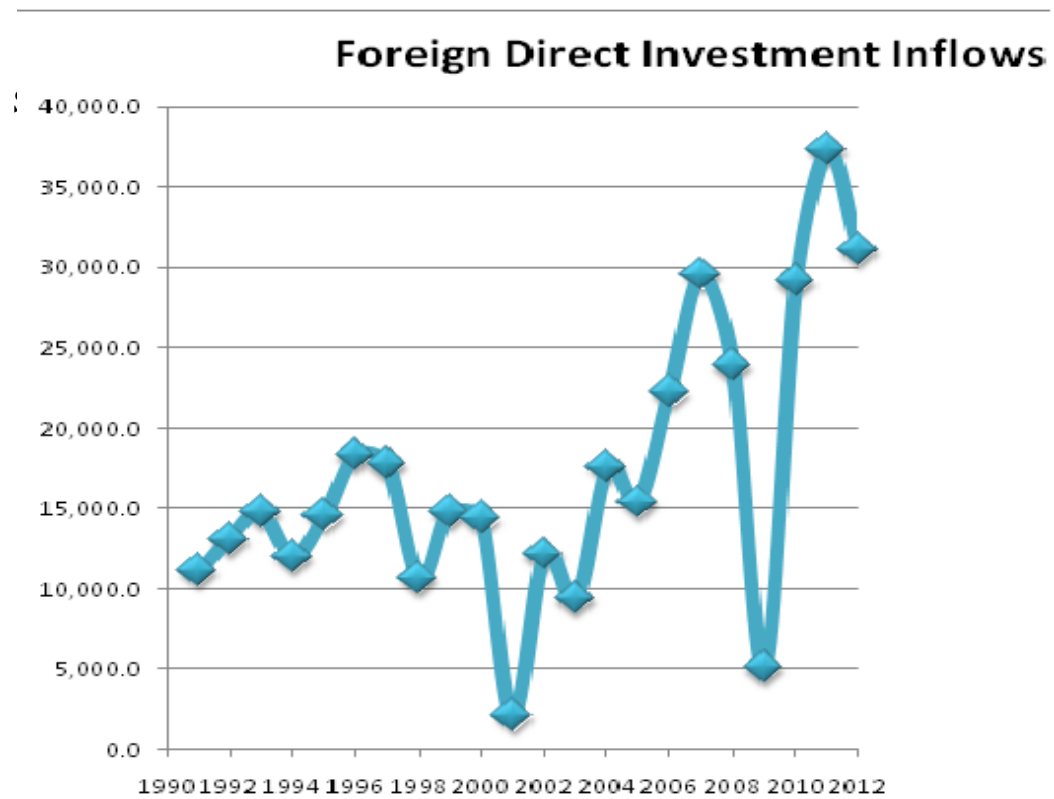


However, Malaysia is among the list of the countries that are in continual progress to attract the FDI inflow to achieve economic growth with the help of acceleration in the economic activities. Since 1980, the policy towards trade and investments of the country has maintained. Consequently, FDI has played a vital role in the process of capital formation and leading the countries toward foster development. On the other hand, the Malaysia Government continues in promoting FDI while at the same time encouraged the domestic investments in order to ensure the continuity of local participation in the country's industrial development.

Various policies and measures have been introduced in order to sustain the local competitiveness as well as to remain as an attractive location for foreign investors. Apart from this, as reported by Ministry of Finance that it is believed that the macroeconomic management, sustainability in growth with well-functioning in financial system that have been introduced by the country is an attractive prospect for FDI. FDI in Malaysia has very volatile pattern over the last decade from year 2001-2011. The FDI inflow in 2001 was RM 2105 million, RM 12,173 million, RM 9,398 million, RM 17,572 million, RM 15,396.8 million, RM 22,230 million, RM 29,545 million, RM 23,908 million in year 2002, 2003, 2004, 2005, 2006, 2007 and 2008 respectively. Then it has sudden fall down from RM 23,908 million to RM 5,121 million in 2008. After 2008 it jumps to 29,182 million, RM 29,182.2million, RM 37,326 million and 31,111 million in year 2009, 2010, 2011 and 2012 respectively.

Figure 1.2

*Foreign Direct Investment Inflows in Malaysia for year of 1991-2012*



### **1.3 Problem Statement**

Every host country has a different way to attract the activity of foreign direct investment as they have different constraint and culture. As we are concerned that most of the study that being carried out to examine the factors contributing foreign direct investment activity in Malaysia. According to Sique (2006) FDI has becoming main source for inflow of FDI in developing countries. The contribution of the FDI inflow in the economic growth has been widely discussed by many researchers but most of the studies concluded that FDI is long lasting investment where the investors have interest and control of the resident entity in a nation, as well as in Malaysia. Thus, the FDI has contributed significantly to the economic development of Malaysia. Many researchers such as Kindleberger (1969); Caves (1971); Zaman et al., (2011) and Yousaf et al., (2008) come out with variety of finding toward few factors indicate in order to identify what are the appropriate factors that affected most towards the FDI inflows in the host country. It is widely held in economic literature that FDI is an engine of growth in developing economy.

In the recent decade, we found that the rapid growth of developing countries in Asia has attracted and facilitated by FDI flows which have been increased. Therefore, Malaysia is among the developing countries particularly in Asia. These are countries gradually removing the restriction and implementing the supportive policies to smooth the way to attract the FDI inflow. According to Borensztein 1998, De Mello 1999, Hermes & Lesink, 2003 identify that some empirical researches also suggested that whether FDI promotes economic growth or not depends on the country development absorptive capacity, which is determined by few factors such as quality

of human capital, level of financial development, production, price, employment, economic growth, development and general welfare.

As mentioned by Fazidah (2013); Shahrudin, Yusof, and Mohd (2010); Masron and Abdullah (2010) one of the major factors to be under consideration for attracting FDI is the size of the economy as well as the perspective of the economy, where the FDI will be invested. As mentioned by Yong and Tuck (2009) that exchange rate served as the factor that can either be beneficial or can make the situation worse for the host country, in mostly studies the exchange rate and exchange rate volatility has been studied as a factor that influence the inflow of FDI in any country. Besides that infrastructure development such a status of telecommunication availability of airport and railway facilities play a vital role to convince the investor to invest in a specific country. Over the last few years, most of the countries in the world has develop conducive and friendly business environment to grab global business opportunities by attracting more investors to invest in the country. Malaysia is also very active to take effective measures in this regards.

Malaysian government has shown seriousness in the process of transforming the economy to be better developed. It takes necessary action to promote the inflow of FDI in the Malaysia. These actions are taken due to the intension of the government to ensure the 10<sup>th</sup> Malaysian plan as successful plan. In order to achieve the plan government should know the significant factors in attracting and increasing the inflow of FDI in Malaysia.

Therefore, we found that the foreign direct investment (FDI) flows has increased dramatically in most of the countries in the region. Theoretically, many important factors tend to influence the selection of the country as investment

locations. The developing countries which are emerging economics and their magnitude of growth depending on how successfully they are part of the global economy, it is worth to well aware and understand the factor/ the criterion on the basis of that Multinational Companies (MNCs) decide to invest abroad.

As Malaysia also faces the same problem where in several years indicate that some of the foreign companies which operated in Malaysia have moved their business to some other countries such as to China, Vietnam, and Indonesia in order to remain their operational here. Therefore, Masron and Abdullah (2010); Shahrudin, Yusof and Mohd (2010) and Choong & Lam (2010) conducted studies to identify what are the most appropriate factors contributing towards foreign direct investment activities in Malaysia. The results indicate that the FDI is typically sensitive to some factors, but lack of robustness, including cost of labour, tax rate, trade barriers, balance of trade and exchange rate that impact FDI inflow in positive and negatively.

As per the figure 1.2, the FDI inflow fall down from RM 23,908 million to RM 5,121 million in year 2008. Then it jumps to RM 29,182 million in year 2009, after that in year 2010 it increased from RM 29,182 million to RM 37,326 million and decrease again to 31,111 million in year 2012. This volatility in the pattern warrants having an investigation into what are the key forces that stimulate FDI in Malaysia

Shahrudin, Yusof and Mohd (2010) investigated the determinants of FDI in Malaysia for the period 1970-2008 using different approach analyzing the dynamics of the variables such as market size, global integration, business friendly environment and suggested that political stability may also be another improvement in model. Mathur and Singh (2013) attempted to address these questions by empirically modelling determinants of FDI flows to emerging market economies, using a spatial

approach, focusing on corruption for the time period of 1990 to 2009. Fazidah (2013) examined the determinants that attract foreign direct investments (FDI) in Malaysia focusing on infrastructure, exchange rate and market size. Also mentioned that identifying determinants of foreign direct investment (FDI) in Malaysia is a broad and complex issue. Fazidah (2013) further suggested that to get a better result, future researchers are advised to take a longer period of time in carrying out the study.

By going through the literature review of Malaysia economy related to the FDI inflows, a fresh comprehensive study of the FDI inflows and related issues pertaining to macroeconomic variables and business environment in the growth process of Malaysia as a developing country. The present study intended to analyse the investment flow during the period (1991-2012)

As per the literature review conducted, none of the above mentioned authors attempted to assess the impact of macroeconomic variables and business environmental variables together. It cannot be denied that there is a glaring research gap in perceiving the overall economic and political situation of the country in the new millennium era. The present study, thus, attempted to fill up the gap by examining the significant variables that can influence FDI in Malaysia, this current study includes both macroeconomics variables (GDP growth rate, exchange rate, import, export, inflation) and also in business environments (Corruption and Political Stability) for a more longer period from year 1991-2012. These significant determinants can influence the FDI inflow in Malaysia.

## **1.4 Research Questions**

The major source of capital that is indispensable for growth and development in the developing country like Malaysia, are mostly sought through the global integration by the inflow of FDI. Economic policy makers of Malaysia duly recognise the need to increase the inflow of FDI in the country in order to meet their macroeconomic goals such as high growth rate, large and increasing national and per capital income, and eradication of poverty. Under the dimensions of business environment, any developing country that has major socio-economic problems associated with political stability and corruption in the country need to be empirically investigated (Yousaf, Hussain & Ahmad, 2008; Shahrudin, Yusof & Mohd (2010).

The present study, thus, focused to deal with the following research questions:

1. Is there any relationship between macroeconomic variables (GDP growth rate, exchange rate, import, export, and inflation and FDI inflows in Malaysia?
2. Is there any relationship between business environments (corruption index, political stability) and FDI inflows in Malaysia?

## **1.5 Research Objectives**

The present study provides a better insight to understand the phenomenon of FDI inflows in Malaysia. Thus, the objectives of the current study are as follows:

- 1) To examine the relationship between macroeconomic variables (GDP growth rate, exchange rate, import, exports, inflation and FDI inflows in the developing economy in Malaysia.

- 2) To determine the relationship between business environment corruption index and political stability) and FDI inflows in Malaysia.

## **1.6 Scope of the Study**

This study utilises macroeconomic yearly time series data in Malaysia collected for the period 1991-2012. Seven independent variables are used in this study, under the categories such as Macroeconomic variables (including GDP growth rate, exchange rate, imports, exports and inflation whereas the Business Environment are corruption Index and political stability) and FDI in Malaysia as dependent variable. In addition, the statistical tool that is used in this study is limited to the measuring of correlation coefficients and multi regressions. Therefore, the running of both short and long term relationship among the variables will be established in order to test the hypotheses envisaged for the current study.

## **1.7 Significance of the Study**

The present study intended to contribute significantly to the existing literature by presenting a comprehensive approach in analyzing the issue of foreign capital and growth for Malaysia. The approach as well as the findings of the study was of great importance for academicians and decision makers by providing a better understanding of the factor that might influence the FDI inflows in a country like Malaysia. The study is based on analytical and empirical ground since it relates to the nexus of relationship between FDI and macroeconomic and business environment in Malaysia. However, this study can be considered as an endeavour to expand the literature by exploring the effect influencing variables both on macroeconomics variables and business environment in enhancing the country's FDI attractiveness in developing economies like Malaysia. Apparently, for the policy makers, this study was of a great



value and can be used as a guideline on how Malaysia, as well as other developing countries, can facilitate the FDI inflows to their economy by creating stable political environment, corruption less national environment and good infrastructure for the country. Thus, the results of this study will provide suggestions to the government of Malaysia on how to attract foreign investors by promoting an attractive business environment which is eventually characterized by meaningful political stability with good infrastructures in the country's business environments.

## **1.8 Organisation of the Study**

This study is divided into five chapters as follows:

**Chapter 1** elaborates on the background of the study, problem statement, research questions and objectives, scope of the study, significance of the study and organization of the study.

**Chapter 2** reviews the related literature of FDI; additionally this chapter gives a significant attention to the relationship between macroeconomic variables and business environment.

**Chapter 3** presents the research methodology of the study. This chapter also provides detailed on data collection method and also provides explanations on the statistical techniques used for preparing data for the multi regression analysis and hypotheses testing.

**Chapter 4** presents the analyses of data and describes the findings of the study in form of figures, tables or text. Result and discussion also be included depending on the nature of study.

**Chapter 5** presents the conclusion and recommendation base on the objectives. Therefore the significance of the findings and theoretical, practical and policy implication also will be included. Besides, some recommendation and suggestion of direction for future research also included.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter synthesizes a broad review of the past literature pertaining to various aspects and issues of FDI flows and requirements in an economy. In addition, this chapter discusses the theory related to the various variables of the FDI in a developing country such as Malaysia.

#### **2.2 Foreign Direct Investment (FDI)**

FDI can assist to enhance the economic growth with the ability to allow host countries get access to the latest and advance technologies which not accessible domestically (Boliden, 2005). It can also be noted that with this inflow of FDI, domestic investors can also adopt the latest technologies. In short, the effect of FDI on economic growth must be positive, especially in the countries which are considered as developing and suffering from deficiencies in capital stock with low productivity (Johnson, 2006). An argument related to FDI is made as it causes an effectiveness of domestic organizations (UNCTAD, 1999).

#### **2.3 Definition of FDI**

FDI has been defined differently in the economic and international business literature. However, The International Monetary Fund (IMF) categorically defined FDI as the “an investment to get a long term interest in enterprises which are making their operation in other economy than the investor’s economy. The aim of the investor is to have an efficient voice in enterprise management” (IMF, 1993). This definition fundamentally implies that foreign capital inflows into the host country through the

concerned foreign investment is meant to acquire long lasting interest in the business enterprises to be conducted by the investor. Apparently, the investor's key reason is to acquire an effective control in the conduct of the concerned business. In this regard, further, it may be clarified that the foreign body of linked entities that make such investments is referred to as the direct investor.

The subsidiary of multinational companies in which direct investment has been made is generally known as "direct investment enterprise". According to Korpi (1989) under the process of FDI, in the corporate sector, a single foreign investor either owns 10 percent shares or voting power in the decision making management. In general, FDI essentially relate to international capital inflows in real terms, thus, providing an external source of capital along with managerial and technical skills.

## **2.4 Literature Review of Macroeconomics Variables and Business**

### **Environment Variables**

#### **2.4.1 GDP Growth Rate and FDI**

In the economic literature, main focus by the researcher are the functional relationship between the GDP and FDI where GDP is incorporated as an explanatory variable to identify economic size of countries in many studies such as Martinez-Zarzoso and Nowak-Lehmann, (2004) and also stated that a high level of income from higher level of productions can attract more investors to invest in that host country.

In the empirical economist, it has been an issue in order to estimate the relationship between FDI and GDP growth rate. According to some arguments

stated that the growth of GDP induces FDI but some other researcher comes out with different opinion. Based on time series data for 11 developing countries, the study of Zhang (2001) has made a test Granger causality in order to analyse the relationship direction between FDI and GDP growth rate. For economic growth, the FDI flow was found the plausible feedback. Moreover, the study of Choe (2003) also illustrated the economic growth and vice versa is caused by FDI granger. The causal influence between the growth of FDI and other four OECD countries output growth were analysed by Ericsson and Irandoust (2001) with the help of using framework of multi country for data from Sweden, Finland, Denmark, but failed to detect any causal relationship between FDI and output growth for Denmark and Finland. They suggested that the specific dynamics and nature of FDI entering these countries could be responsible for these no-causality results. Though, FDI is of utmost importance for countries, still, about the positive relationship of the economic growth and FDI inflow, there is no agreement. It has been revealed in the studies that the data of developed countries illustrate a vague and positive link, while the researchers have found no growth advantages for country of recipient who concentrated on developed countries (Gursoy, Sekreter & Kalyoncu, 2013).

It was concluded in the study of Martinez-Zarzoso and Nowak-Lehmann (2004) that with high income in host countries induces a large amount for investment in overseas' businesses. For the country's economic performance, the national growth indicators are GDP growth rate and real GDP, which with production, goods delivery, consumption, and provided facilities in the country, is reflected. The economic development level of a

country is indicated with GDP trend with the help of vis-à-vis growth rated and for investors, the potential opportunities in domestic market.

According to the study of Adams (2009), the influence was examined related to FDI and direct investment on Sub-Saharan Africa economic growth from 1990 to 2003. A positive and correlation of Direct Investment (DI) was found in the results. The effect of FDI was negative initially on Direct Investment (DI) and was positive in later period in the host country. A net crowding out influence was suggested by the sign and magnitude of FDI coefficients.

The study of Wijeweera, Villano and Dollery (2010) stated that by having theoretical background is plausible for assuming a positive association between FDI and economic growth. Therefore, the purpose of revealing the real essence, with the help of using stochastic frontier model and panel data of 45 countries from year 1967 to 2004, is to estimate the relationship between FDI and economic growth. According to the result, the presence of highly skilled labour shows the inflows of FDI has significant positive influence on economic growth, the negative influence of corruption on economic growth while the economic growth is increased with trade openness through gaining efficiency.

According to Belloumi (2014), no significant Granger causality was reported from economic growth to FDI from FDI to economic growth and from economic growth to short run trade. Related to FDI, the generation of broader positive spill over externalities belief is wide in host country, but in the context of Tunisia, the results did not confirm this belief. Kumar (2014)

had attempted to analyse the trend of FDI flow into the country and to find the relation between FDI, FII and GDP of the country. The results of the analysis showed that the India is still far behind in comparison to some of the developing countries like China. It has been proven the FDI related ongoing upsurge which has allowed in sectors and industries, has proven that in the resilience of Indian market the foreign investors have faith.

FDI inflows were demonstrated by Johnson (2006) which stated that it increases the developing countries economic growth but not of advanced nations. A cross country analysis was done by Alfaro (2003) and found an ambiguous influence of FDI on host country's economic growth; a negative impact on growth of FDI inflows in primary sectors. On the relationship of FDI and economic growth the evidence are mixed of other studies (Wijeweera et. al. 2007; Zhang 2001; Johnson 2006).

For policy maker, the FDI and rate of economic growth relationship is considered important. In the past two decades noted a massive surge in FDI inflows. In fact, according to UNCTAD (2005), the increase in worldwide FDI almost raised from US\$55 billion in 1989 to US\$1,400 billion in 2000. The policy makers and academic economists make more effort because of the unprecedented FDI growth in order to understand the FDI inflows and GDP growth relationship in host countries.

#### **2.4.2 Exchange Rate**

These days, exchange rate is one of the most significant issues tackled in economic research (Mohammad et al., 2010). It has been acknowledged that there is an association between FDI and exchange rate. If the currency of a

country is devalued, there is a chance for foreign investors to invest in that country to buy assets at lower price. This is especially seen in the case of foreign firms having identified specific potentiality in their targeted markets envisaged (Blonigen & Ma, 2011). The relationship between exchange rate and FDI inflows was traced by Froot and Stein (1991) and found that FDI inflows are negatively correlated with the external the value of the US dollar. This suggests that a depreciated currency can stimulate the purchase and controlling power of productive corporate assets.

According to the study of Takagi and Shi (2011), the influence of exchange rate was estimated on FDI. With the help of panel data in Japanese inflow of FDI to 9 economies in 1987 to 2008 and explored that (1) with the decrease in Yen against host countries, the FDI also decreases; (2) with the increase in exchange rate volatility it increases (3) Asian financial crisis had little influence on FDI particularly at the time of removal of data related to financial flow. A new result focuses the negative response relate to FDI changes to the third moment of monthly exchange rates: with the positively skewed distribution, the FDI volume was positive.

According to the study of Lee and Min (2011), the behaviour of FDI was noted changed after 1997 crisis in Korea. In response to exchange rates the change in FDI is robust. While the level of exchange rate is mixed enough which is considered consistent with current option based theory of FDI. Second, the FDI is persistently affected by exchange rate volatility, while the level misalignment is considered temporary; making a suggestion the MNEs are regarding volatility as determinant of FDI in comparison to exchange rate



level misalignment. Third, the FDI and uncertainty related strong evidence is found, which may provide insight on the mixed results of the literature on FDI and exchange rate variables.

The study of Jeanneret (2007) made an investigation on the influence of exchange rate volatility on FDI with the help of using 27 countries panel data from the year 1982-2002. A non-uniform and U shape relationship is shown in the results between exchange rate and FDI. The role of exchange rate has been considered important in previous studies in the analysis and is considered basic determinant of FDI inflow. The flow of US FDI to Latin America according to empirical results is deterred by exchange rate volatility. The impact of conflict and corruption on FDI flows is significant (Masten, 2007).

The arguments made by Bannassy and Fontagne (1999) the decision of FDI may be altered by movements in exchange rate and thus are demonstrating the relationship with perspective of trade. Moreover, if the investor is serving in local market, trade and FDI are considered substitute and the relationship is as: with the appreciation of currency the FDI is increased because of the local consumer's high power; on the other hand, FDI is increased with depreciation as well because of the increase it is making in the foreign wealth and also the investing capacity

The exchange rate influence and the stability of exchange rate on FDI are considered twofold for foreign investors. Moreover, with depreciation the local products and assets are considered cheaper and cause increases in FDI. And it would cause decrease in the incentives ensured for the foreign firm for

entering to the country (Yusof, 2009). However, it has been observed that significant decrease in US DI were found to be related with the increase in real value of foreign exchange and very strong reductions tended to be associated with the expected appreciation of real foreign exchange. Few other researchers (such as, Blonigen, 1997; Kiyota & Urata, 2008) confirmed the similar findings. Theoretical considerations based on the real wealth and real labour cost effect suggested that a stronger US dollar may deter FDI into the US economy.

### **2.4.3 Imports**

The study by Aizenman and Noy (2009) found that countries with more imports can attract more FDI and there is a positive relationship between FDI inflow. The study of Liu et al (2001) made an observation of the causal relationship of FDI inflow and foreign trade of 19 economies and with the help of Grangers in China is causing growth in the China FDI inflow. The study of Dasgupta (2008) focuses on the influence of international trade and macroeconomics related investments namely exports, imports and inflow and outflow of FDI in India from 1970 to 2005,

The study of Bertschek (1995) made an analysis of German organizations from 1984 to 1988 which state that on innovative practice of domestic firms the influence of FDI is not positive. The study of Bertschek (1995) uses the approach of random effect of Chamberlain and found that on both product and process innovation the influence of FDI is positive. According to Kok and Ersoy (2009), found the factors influencing the FDI on the basis of cross sectional and panel data for a number of 24 developing

countries from 1983 to 2005. The analysis revealed that import has impact of FDI, and inferred that country can develop policies to encourage the import of investment goods instead of the import of consumption goods.

Ahmed, Cheng and Messinis (2011) reported that with the help of low performance of economy of Sub-Saharan African (SSA) in 1980, the foreign trade and FDI was reformed. The results of the analysis showed that on economic growth the influence of FDI and exports is significant. The result of the test of Granger-type causality the relationship of FDI, exports, income and imports variables.

The determinants of FDI was studied by Zheng (2009) in china and made the literature updated by making available a complete empirical comparison analysis. In order to find out the FDI inflows determinants, by considering the characteristics of both home and host countries, two panel data sets and two statistical models were used. Between the two countries, similarities and difference were shown by empirical results. The determinants of both countries are imports, cost of labour, market growth, and political risk of country and liberalization in policy. However, for the FDI of china, size of market, cost of borrowing and exports are considered important, while for the FDI of India, cultural and geographical distances are important.

#### **2.4.4 Exports**

It is the effort of making policies and strategies framework which will make the economy to gain the goals of development like poverty eradication. It is important for academicians and policy makers to know the importance of variable to develop appropriate strategy and will influence the development of

economy. Thus, finding the relation of exports and FDI is important for explaining the economic performance of a country. FDI and exports can be substituted to each other (Dunning, 1977). The study of Bhagavati (1978) mentioned that export oriented host countries the efficiency of FDI is more pronounced.

Marinescu and Constantin (2010) made a study on the association of exports and FDI of a country focusing Romania. First, the theoretical background is created related to situations in which a transitional corporation makes the exports of a country and the level of impact. The positive stimulus is focused in analysis that FDI can be boosted for the competitiveness of exports. The relationship of domestic relative price of exports is direct to exports supply and export supply is reduced by higher domestic demand. On the performance of export the foreign investors has no significant influence, although the FDI coefficient has positive sign (Sharma, 2000)

The study of Dritsaki, Dritsaki and Adamopoulos (2004) made an analysis what is the relationship of exports, FDI and economic growth in Greece, from 1960 to 2002, the study result shows a long run equilibrium relationship while the results of Granger causality test are causal relationship. The causality test of GDP, exports and FDI was done by Miankhel, Thangavelu and Kalirajan (2009) in the countries like Chile, Malaysia, Pakistan, Thailand, and Mexico and also suggested a relationship between exports and FDI.

Bhatt (2013) studies the relationship between FDI, Exports and GDP using co-integration test. The result showed that a long term equilibrium

association between FDI and exports is present. According to Hsiao and Hsiao (2006), it was noted that with making the way for FDI with the help of gathering host country related information which is facilitating investor reduce its cost, FDI is increased by exports. With the help of serving in foreign markets through establishing production faculties, FDI may cause reduction in exports.

It was suggested in the proximity concentration hypothesis that horizontal cross border expansion is caused by the transaction related high cost and trade barriers and hence, FDI is encouraged. In situation like this FDI and international trade are considered substitute (Krugman, 1983; Horstmann & Markusen, 1992; Brainard, 1997). Therefore, the FDI and exports has a negative relationship. Moreover, according to hypothesis of factor proportion, firms are encouraged to involve in vertical integration in cross border which will result in FDI and international trade complementary relationship (Helpman, 1984; Markusen, 1984; Helpman & Krugman, 1985; Ethier & Horn, 1990).

#### **2.4.5 Inflation**

In the study by Akpokodje (1998), he indicates in Tobin-Model, the interest is reduced with the help of high rate of inflation; therefore the real capital is balanced if the portfolio is moved away from real money. Thus a high real investment is expected to be included by high inflation. But in the undeveloped financial and capital market of Nigeria, the effect of Tobin Model is not applied. Despite, private investment is lowered in Nigeria with high rate of inflation. Moreover, in Nigeria, the higher inflation is considered a

predictor of the inefficacy of government related to the management of economy. In Malaysia, FDI and import relationship has been shown positive in analysis.

Inflation rate which is considered location advantage determinants, applying the stabilities of macroeconomics and foreign investors related potential risk. Moreover, the study of Botric and Skuflic (2005) has considered inflation as factor seeking efficiency. Macroeconomic instability is predicted by volatile and high inflation and it is also considered impediment to FDI.

Saleem, Zahid, Shaoib, Mahmood and Nayab (2013) investigated the impact of growth and inflation on foreign direct investment (FDI) of a country by using data from ADB and SBP for the time period of 1990 to 2011. It was found that FDI and inflation have a positive relationship. In the study of Sayek (1999), by using the co-integration analysis, they examine the relationship between inflation and FDI. The theoretical model was supported by the results from the analysis of impulse response, where it shows 3% increase in the inflation of Canada but it reduces the US FDI in Canada by 2%. There is also an increment of domestic investment by 1%. Similarly, with the 7% increase in the inflation of turkey, the US FDI in turkey is reduced by 1.9%, besides 0.3% of the domestic investment of US is increased. However, the study by Nnadozie (2000) shows that there is insignificant relationship between inflation and the FDI inflows while as the study by Shamsuddin (1994) found that inflation has a negative influence on FDI.

The study of Yusop and Choong (2002) analyses the factors influencing the Malaysian manufactures sectors FDI from 1965 to 1999. In the

long run, the determinants and FDI is integrated but in the short run, the inflation is considered important with other variable like GNP and deficit in current account.

According to the study of Omankhanlen (2011), the influence on inflation and exchange rate on FDI was assessed and also its relation with economic growth in Nigeria. This study analyses 30 years data using linear regression analysis. The results of analysis revealed that inflation has no effect on FDI in Nigeria. Aw and Tang (2010) made an effort for assessing the effect of China joining WTO and the corruption in 2001 on the inflow of FDI in Malaysia. The results suggests that co-integration relation exists among inflow of FDI, market size, openness, infrastructure, interest rate, exchange rate, and inflation. Inflation rate found to be significant determinants of inward FDI in Malaysia, both in the long-run and short-run

The study of Azam (2010) made an effort for studying the economic determinants on FDI from three central Asian countries named as Turkmenistan, Armenia, and Kyrgyz Republic. The analysis showed that inflation has insignificant with expected negative sign with FDI. This indicates that there is negative relationship exist between inflation rate and FDI. The determinant of local advantage, the inflation rate implies the stability of macroeconomic and foreign investor's related potential risk. Moreover, the study of Botric and Skuflic (2005), to external debts and openness, has used the inflation as a factor of seeking efficiency. The macroeconomic instability is predicted by volatile and higher inflation and to FDI it is considered impediment.

#### **2.4.6 Corruption Index**

Based on the study by Freckleton (2010) corruption is defined as an abused of public power for private benefits is now widely known as a policy of influencing almost all aspect of social and economic life in order to sustain the development and economic growth, especially in those developing country. Houston (2007) indicated that the “effect of corruption on the economics growth performance have the positive effect on the economic growth in the countries with poor rule of law”. Therefore, as concluded by Swaleheen and Stansel (2007) that the corruption rose up the economic growth in the countries with high economic freedom while hinders growth that one with low economic freedom.

Based on the study carrying out by Akcay( 2001) find the evidence of negative relationship between the FDI and Corruption and concluded that the most significant determinant of FDI are come out from market size, corporate tax rate, labour costs and degree openness. This was supported by Habeb and Zurawicki (2002) regarding the negative effect of corruption on FDI. Their analysis showed that the foreign investors generally avoid corruption as it considered wrong and can create operational inefficiencies.

Mauro (1995) investigates how corruption and other 55 factors suggested by Business International influences the economic growth of 68 countries chosen by Business International. The analysis quantifies the effect of such influence based on the survey, where respondents rated the risk factors including corruption on the scale of 1 of 10, Mauro (1995) identifies



that corruption slows down the economic growth of a country and has an adverse effect on the investment level.

Egger and Winner (2006) investigate the association between FDI and corruption, using a panel data model in a sample of 59 countries with OECD and non-OECD economies covering the period of 1983-1999. These authors conclude that corruption has a negative effect on FDI for any of the countries analyzed. That conclusion highlights that effect of corruption on the amount of FDI is outweighed and should be taken into account in both OECD and non-OECD countries.

According to Campos et al., (2010), corruption can have both positive and negative effects on FDI. Other studies find negative (Hines, 1995; Al-Sadi, 2009; Egger and Winner, 2006; Habib & Zurawicki, 2002) or positive (Leff, 1964; Al-Sadi, 2009; Bardhan, 1997) links between CPI and FDI. Mauro (1995) presented most influential empirical study about the interrelations between corruption and investments. The effects of corruption on FDI have been largely explored in the literature and different relationships have been indicated. For example, Wei (2000) found a negative relationship between FDI and corruption, while the study of Hines (1995) disclosed a negative effect of corruption on FDI. A non-significant effect of corruption on FDI was found by Freckleton et al. (2011). Al-Sadi (2009) discloses that additional factors such as institutional quality of a country may determine the effect of corruption on FDI using a panel data fixed effects model for 117 countries over the period of 1984-2004. He found that corruption scared away foreign investors that confirmed a negative impact of corruption on FDI.

Freckleton et al. (2011) examine the association between FDI, economic growth of a country and corruption in developing and developed countries covering the period of 1998-2008. They suggest that there is a significant effect of corruption on FDI in the short and long runs. Moreover, they stated that corruption needs to be addressed in the policy making because of its negative impact on the society and economic activities of the developing countries.

#### **2.4.7 Political Stability**

As we know that in every country, the political stability plays important roles related to a country's business and normal macroeconomic phenomenon. The government good governance and political stability provide insight to political risks (Husain, 2009; Javed et al., 2012; Shahzad et al., 2012). Political stability enhances the probability of attracting FDI inflows in to the developing countries.

Therefore it shows that bad political instability will cause the country's economic growth and the process of growth negatively affected by the dent on both physical and human resources. With bad political conditions, foreign projects will be delayed until the business environment is considered favorable and conducive (World Bank, 2011; UNCTAD, 2010). Considering Pakistan, World Bank (2011) stated categorically that because of political instability and corruption the country has low investment of the private sector.

Many studies conducted examined the relationship between political stability and FDI (Buss & Hefeker, 2007). Most of the study's conclusions generalized the positive impact of political stability on FDI. Kobrin (1984),

however, concluded that the empirical findings implied inconsistent and mixed results regarding the effect of political instability and the FDI flows.

Schneider and Frey (1985) observed a negative effect of political instability on FDI flows in a cross sectional analysis of FDI flows in the case of selected 36 countries for the period between 1977 and 1982. Knack and Keefer (1995) found effects of political instability on the level of economic growth and investment and also argued that property rights are not enforced in politically unstable environments. It has been asserted that adverse effect on property rights led by political instability tends to reduce both growth and investment.

Factors such as political risks, investment environment, insufficient infrastructure, regulatory framework bureaucratic hurdles and red tape, lack of judicial transparency, and the degree of corruption in the host country are observed to have mixed influence when their influence on FDI inflow was examined. While some studies, such as (Singh & Jun, 1995; Wheeler & Mody, 1992), observed that political risk was insignificant in affecting the FDI inflows.

The influence of import tariffs, macroeconomic stability, quality of institutions, political stability, and physical infrastructure is considered significant on FDI (Wei, 1997; Mallampally and Sauvart, 1999; Trevino et al., 2002; Biswas, 2002), and the influence of corporate taxes is negative (Wei, 1997; Gastanaga et. al., 1998; Hsiao, 2001).

The studies such as (Root & Ahmed, 1979; Schneider & Frey, 1985), however, traced that political instability and riots and regular constitutional changes in government significantly affected FDI inflows in the developing country. These mixed results might attribute to the problems of setting reliable proxies for the reflection of qualitative factors, like as political instability in empirical analysis (Lim, 2001; Alam, Mian, & Smith, 2006; Kafiet al., 2008). Political instability is essentially a qualitative element of a research. Several studies also explained the infrastructure, business environment, and political instability as restrictions towards the inflow of FDI. According to Musila, Jacob and Sigu (2006) it is important to realize that the political stability, sound macroeconomic stabilization and attractive investment policy will carry to increase FDI in to the host country.

## **2.5 Chapter Summary**

The main ideal in this discussion is to trace the role and impact of the major variables in both macroeconomics and also business environment of FDI inflows in Malaysia. Besides, determining variables in attracting the FDI inflows in the country's economy as crucial factors in order to enhance the economy growth of the host country as well as Malaysia, as been discussed prosperity over the years. In the view

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter spells out the theoretical framework for the hypotheses envisaged under the study. Specifically, this chapter outlines the relevant hypotheses concerning the relationship between FDI inflows in Malaysia. It also reports the data collection procedures and the techniques of analysis. Finally, this chapter explained the statistical techniques used to pursue the mode of analysis to achieve the objectives of the study.

#### 3.2 Research Framework

In specific terms, the theoretical research framework was designed to illustrate the variables incorporated in this study trace their relationship to detect their influences on FDI inflows in Malaysia. Figure 3.1 shows the research framework model for the present study.

##### Independent Variables (IV)

##### Dependent Variable (DV)

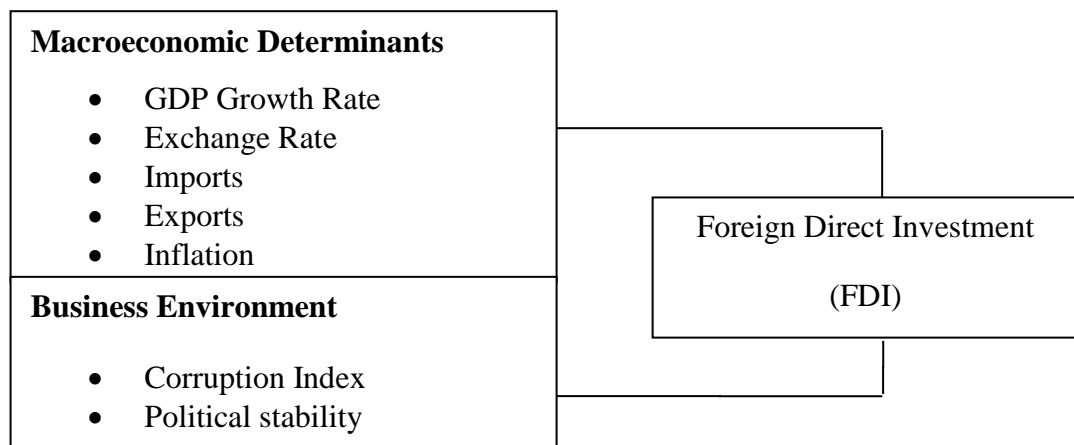


Figure 3.1 Research Framework

### **3.3 Hypotheses Development**

As referred to the research framework in figure 3.1, corresponding to the research design, the mode of the present study is confined to certain major hypotheses pertaining to empirical economic relations narrated.

#### **3.3.1 GDP Growth Rate and FDI**

In most of developing countries including Malaysia, FDI and GDP Growth has a closely relationship. Base on the study conducted by Martinez-Zarzoso and Nowak-Lehmann, (2004). It also stated high level of income due to higher in production level which attracts more investors to invest in the host country. Therefore, there was concluded that with higher income in host country induces larger amount for investments in overseas businesses. But as mentioned by the study conducted by Mencinger (2003) revealed that in the case of transition economies of Eastern Europe, FDI inflows rate had a negative impact on GDP growth rate. Mun, Lin and Man (2009); Lean and Tan (2011) and GuechHeang and Moolio (2013) also found significant relationship between economic growth and foreign direct investment inflows (FDI) in Malaysia. Based on the results of the previous studies, the current study formulate hypothesis as follows:

*H1: There is a relationship between GDP growth and FDI*

#### **3.3.2 Exchange Rate and FDI**

According to the study Bloningen& Ma (2011) in the case of foreign firms having identified specific potentiality in their targeted markets envisaged, it shows that the positive relation between exchange rate and the FDI inflow. If

the currency of a country is devalued, there is a chance for foreign investors to invest in that country to buy assets at lower price. The study by Rehman et al. (2011) found that exchange rate has a significant positive impact on FDI inflow. Besides, in the study by Goldberg and Kolstad (1995) also found that in the economic effect of short-term exchange rate, it was supported to the hypothesis where volatility of exchange rate will contribute huge to the internationalization of production. Takagi and Shi (2011) found that exchange rate volatility has positive impact on FDI inflows. The effect of exchange rate volatility on FDI is persistent (Lee & Min, 2011). Therefore, based on the literature cited the following hypothesis has been formulated.

*H2: There is a relationship between Exchange Rate and FDI*

### **3.3.3 Imports and FDI**

The study by Aizenman and Noy (2009) found that countries with more imports can attract more FDI and there is a positive relationship between FDI inflows. However, it is difficult to indicate that inflows of FDI as it has different effects on imports in different types of goods. Their study inferred that there is a strong relationship between FDI inflows and imports, mainly in industrialized goods in the case of USA. Ahmed, Cheng & Messinis (2011) found FDI and imports have a significant relationship. Moreover, Shahbaz and Rahman (2012) reported that there is long run relationship between imports and FDI. By keeping in view the results of the previous studies, the following hypothesis is developed.

*H3: There is a relationship between Imports and FDI*

### **3.3.4 Exports and FDI**

The study by Dunning (1977) found the relation of exports and FDI is important to explain the economic performance of a country, therefore FDI and exports can be substituted to each other. As mentioned by Bhagavati (1978) that the host country with export orientation can make the FDI inflows more efficient. Long-run relationships between exports and FDI are identified in a co-integration framework (Liu, Burrige & Sinclair, 2002). Ahmed, Cheng & Messinis (2011) reported the Interrelatedness of exports and FDI. It was supported with the study by Bhatt (2013) mentioned the relationship between exports and FDI. Based on the argument cited above, the following hypothesis has been postulated.

*H4: There is a relationship between Exports and FDI*

### **3.3.5 Inflation and FDI**

In general, the inflation rate is used to measure the level of price stability and economic stabilisation. Botric and Skuflic (2005) have considered inflation as a factor that is used for seeking efficiency. Macroeconomic instability is predicted by volatile and high inflation and it is also considered an impediment to FDI. Mathur and Singh (2013) mentioned that high inflation would inhibit inward, while Omankhanlen (2011) found that inflation has no effect on FDI. But study by Azam (2010) through its analysis from three central Asian countries Turkmenistan, Armenia and Kyrgyz showed that inflation has an insignificant relationship with FDI.

*H5: There is a relationship between Inflation rate and FDI*



### **3.3.6 Corruption Index and FDI**

Based on the study by Freckleton (2010) that corruption is defined as an abused of public power for private benefit which widely influenced all aspect of social and economic life in order to sustain the development and economic growth. It has been supported by Houston (2007) that the countries with poor rule of law, corruption will have a positive effect on economic growth on that particular country. Mathur and Singh (2013) also reported the significant impact of corruption on FDI inflow. Habeb and Zurawicki (2002) showed the negative relationship between corruption and FDI where foreign investor will avoid corruption as it is morally wrong and can create operational inefficiency.

*H6: There is a relationship between Corruption index and FDI*

### **3.3.7 Political Stability and FDI**

According the study by (Buss & Hefeker, 2007) examine the relationship between political stability and FDI where most of them generalized the positive impact of political stability and FDI. It shows that the investor willing to invest in particular countries that safe for them to run the operation and businesses.

*H7: There is a relationship between Political Stability and FDI*

In order to examine the effect of political stability on FDI inflows, there have been mixed findings in the literature. For example, study by (Schneider & Frey, 1985; Knack & Keefer, 1995 found that political stability has significant effect on FDI inflows. Musila, Jacob and Sigu (2006) noted that it is important

to have political stability as macroeconomic stabilization and with an attractive investment policy will attract more FDI into the host country.

### 3.4 Research Design

According to Zikmund (2009) research design refer to a master plan specifying the method and procedures and also the collection of related information. It is a framework or blueprint of the action taken on the research project. Research design describes the nature of the study, time frame, data collection, time frame and data analysis techniques. As to complete this study, the researcher used quantitative design as major source to describe of something usually related with characteristic or function (Malhotra, 2007).

### 3.5 Measurement

The variables used in the present study are conceptualized for an understanding as follows. This section will describe how to measure the variables or describe operational definition.

Table 3.1  
*Operation Definition of Variables*

<b>GDP growth rate</b>	Describe as “the changes in the gross domestic between year where total market value of all final goods and services produced in a country in a given year equal to total consumer”.	Bank Negara Malaysia (2011)
<b>Exchange rate</b>	Refer to “the price of one currency expressed in terms of another currency and can be exchanged for another country’s currency”	UNCATD (2011)

<b>Imports</b>	Refers to “any tangible or intangibles of goods and services that brought into one country from another”	Bank Negara Malaysia (2011)
<b>Exports</b>	Refers to “international trades where goods are produced in one country are then shipped to another country for future trade or sales”.	Bank Negara Malaysia (2011)
<b>Inflation</b>	Refer to “a rate of general level of prices for goods and services are rising and the purchasing power is falling”	Bank Negara Malaysia (2011)
<b>Corruption Index</b>	Corruption control index relate to level as Dishonest Behavior by those in position of power where giving or accepting bribes or any inappropriate gifts, double dealing, under-the table transaction or defrauding investors Degree of corruption as seen by the business people and country analysis which ranging from 100(highly clean) and 0( highly corrupt)	Bank Negara Malaysia (2011)
<b>Political Stability Index</b>	Measured by the discernment of the likelihood that the government will be destabilized or overthrown by unlawful or violent means, armed conflict, violent demonstrations, social unrest, international tensions and terrorist threat, orderly transfers, government stability, internal conflict, external conflict, ethnic tensions as well as domestic violence and terrorism in the country and ranges between 100 (highly political stability) and 0 (low political stability)	(World Bank, 2011; UNCTAD, 2011).

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<b>FDI Inflows</b>	Refer to quantum of foreign investment come into the country	(World Bank, 2011; UNCTAD, 2011).
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### **3.6 Data Collection Procedures**

The present study is based on the compilation of secondary data. The data used in this study are the annual data for the time series of 1991 to 2012. The collected data is used to identify significant determinant of FDI. The data of variables are collected from the United Nation Conference on Trade and Development (UNCTAD) Statistics, Department of Statistics, Ministry of Finance Malaysia, Economic Report, Bank Negara Malaysia and DataStream. Some of the data and information related with the study were gathered from the World Bank Indicator Report and also from The Transparency International Global Corruption.

### **3.7 Data Analysis Technique**

This study use Statistical Package of Social Science (SPSS) and Eviews Software as it provide precise and accurate data to the researcher. SPSS is one of the most widely available and powerful programme to summarize data and determine whether there are significant differences between the groups, to examine the relationship among variables and craft the result. However, the data were statistically analyzed through the following process. The first step; data were summarized and initially analyzed through descriptive statistic. The second step; check the Stationarity of the data through the multiple regression assumption. Finally, the hypotheses were tested through Pearson Correlation of Multiple Regression Analysis.

Therefore, data were analyzed using the frequency distribution, co-relation coefficient and Regression Analysis. Regression analysis is most common statistical approach used for inferential statistics. This method is used to examine the impact of one variable upon other variable (Sykes, 1993). This method not only helps to identify the existence of relationship but also the magnitude of the relationship. In this method one variable counted as dependent variable on which other variables impact as an independent variable(s). The impact of the variables on the dependent variable is calculated in form of a single equation impression. The formulated equation help to describe the relationship, its sign and also we can control variables in the regression analysis. There are two most commonly used regression analysis types, the simple regression and multiple regression analysis. This study incorporates multiple regression analysis to examine the impact of macroeconomic variable and business environment variables on foreign direct investment (FDI)

However, the data were statistically analyzed through the following process in the first step; data were summarized and initially analyzed through descriptive statistics. The second step continued to check the Stationarity of data through the multiple regression assumptions. Finally, the hypothesis was tested through Pearson correlation of multiple regression analysis.

### **3.7.1 Correlation Analysis**

The correlation analysis provides results in form of correlation coefficient which ranges from +1 to -1, representing the strength of association and direction of association also. The near to + will indicates the strong positive relationship and number approaches to -1 indicates strong negative relationship.

### 3.7.2 Multiple Regression Analysis

Multiple regression analysis is used to test the impact of macroeconomic variable and business environment variables on foreign direct investment. According to Burn and Bush (2008), multiple regression analysis is an expansion of the bivariate regression analysis, where more than one variable is used in the regression equation. The Ordinary least square approach is used as it is the best used approach for measuring the impact. Due to its character of Best Linear Unbiased Estimator (BLUE) it provides the best results with minimum error term. The difference between the estimated and the actual regression line is minimum by using this method.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \varepsilon$$

Y	=	Value of dependent variable (Net flow of FDI)
$\alpha$	=	Constant
$\beta_1$	=	coefficient to be estimated
$\beta_2$	=	coefficient to be estimated
$\beta_3$	=	coefficient to be estimated
$\beta_4$	=	coefficient to be estimated
$\beta_5$	=	coefficient to be estimated
$\beta_6$	=	coefficient to be estimated
$\beta_7$	=	coefficient to be estimated
X1	=	Independent variable – GDPGR
X2	=	Independent variable – Exchange Rate
X3	=	Independent variable – Import
X4	=	Independent variable – Export
X5	=	Independent variable – Inflation
X6	=	Independent variable – Corruption Index
X7	=	Independent variable – Political Stability
$\varepsilon$	=	Random Error

### **3.8 Test of Correlation**

#### **3.8.1 Correlation Coefficient**

Correlation analysis is used to analysis the measure of association between variables. The correlation analysis provides results in form of correlation coefficient which ranges from +1 to -1, representing the strength of association and direction of association also. The near to + will indicates the strong positive relationship and number approaches to -1 indicates strong negative relationship. The below table contains details of categories for correlation coefficient.

#### **3.8.2 Coefficient of Determination**

Coefficient of determination which is denoted by R-square ( $R^2$ ), used to determine the explanation provided by the estimated model of regression analysis. It is reflection of how best fit our model is in explaining the changes in the dependent variables. Its value ranges from 0 to 1, the value near to 1 show the strength of the model and the value approaches to zero is the indicator of poor model formulation. There are different acceptability values depending on the field of study. In social sciences and pure science, the value of  $R^2$  to be considered as a good is different. The value ( $R^2=0$ ) is not acceptable as the formulated model unable to explain any variation in the dependent variable, due to independent variables in the model. There are two parts, explained and unexplained part of the regression. It can be the best model to fit in as it can explain variation and the more value of unexplained part indicate that the variations in the model are due to other factors or variables which are not incorporated in the model specification.

### **3.9 Tests of Significant (Hypotheses Testing)**

It is to justify either to accept or to reject the formulated hypotheses for the study. It determines either the proposed relationship is supported by the data or not. Therefore, the researcher needs to test and analyze the collected data. In this regards, researcher need to analyze the data and compute the results on the basis of that results, the hypotheses acceptance or rejection is determined. This depends on the significant level, fixed by the researcher as her confidence on the proposed relationship. The decision criterion is if the calculated value is greater than the tabulated value then it will be reject, in other words we cannot accept the null hypothesis ( $H_0$ ). If the calculated value fall in the tabulated value or less then tabulated value, we can accept the null hypothesis ( $H_0$ ), which means that the explained variation is statistically insignificant.



## **CHAPTER 4**

### **DATA ANALYSIS AND FINDINGS**

#### **4.1 Introduction**

This chapter describes in detail of the analysis and findings of the study pertaining to the hypothesized model. The chapter has three parts, descriptive analysis, estimation of models and also a summary of results.

#### **4.2 Data Analysis**

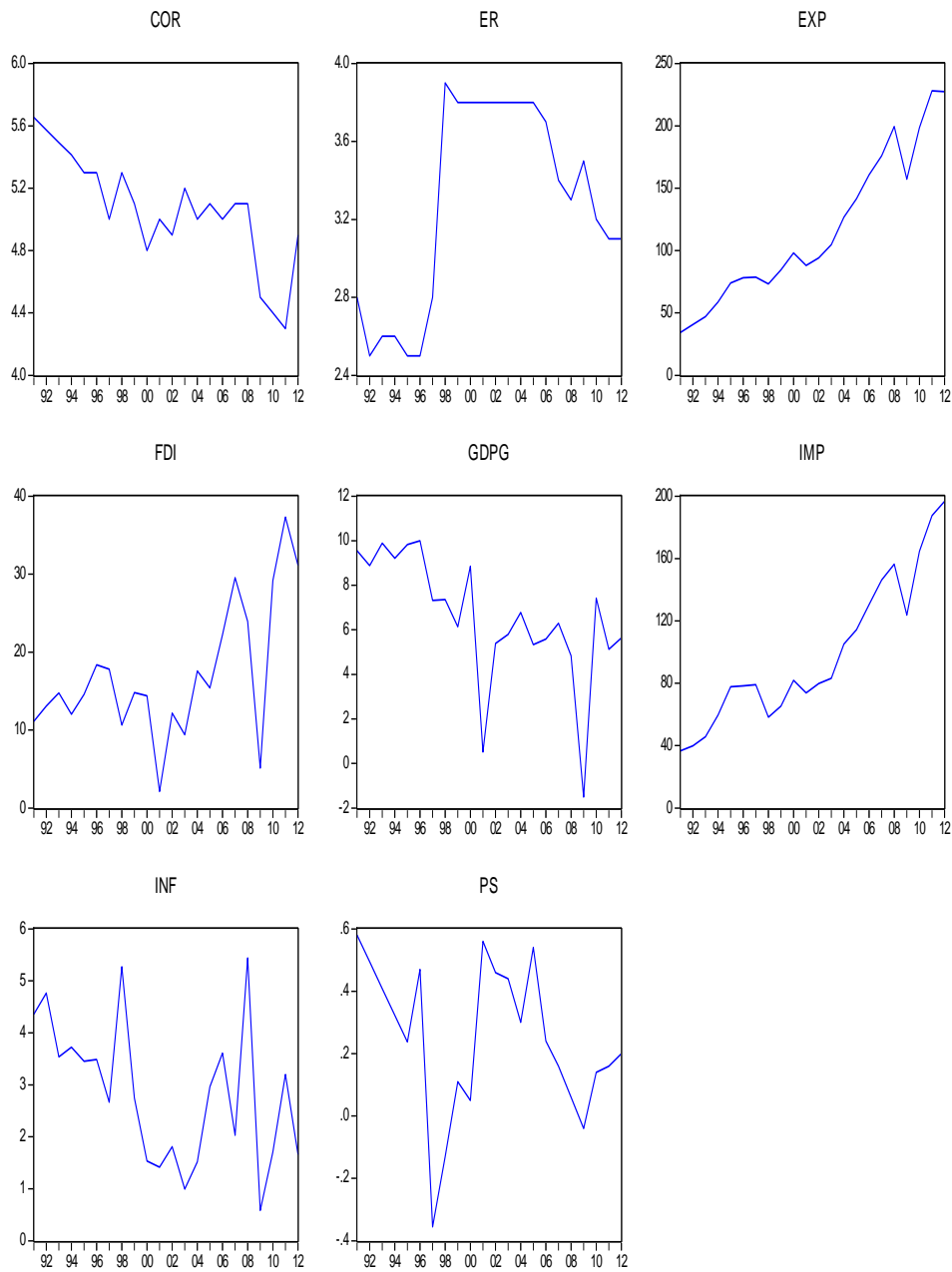
In the present study, the data were analysed using the Statistical Package of Social Science (SPSS) and Eviews Software. The data were statically analysed through the following process, which are; firstly data were summarized and initially through descriptive statistic. Then, it will continue to check the stationarity of data using the multiple regressions assumption. Finally, the hypotheses were tested using the Pearson Correlation Analysis through the multiple regression analysis.

##### **4.2.1 Assessment of Data**

The data for the variables GDP growth rate, import, export, inflation, political stability and corruption index has been plotted to assess the random walk, trend and volatility in the data. The data with trend, random walk, and highly volatile nature cannot simply used directly for analysis. After detection of trends in the data, different functional forms are used to best fit the data in an efficient way in order to get reliable results.

The plotted data shows that there is volatility and trend in the data. So we used ADF to examine the stationarity of the data. The details of scatter plot are shown in figure 4.1.

Figure 4.1:  
*Plotting of Variable for Trend*



#### 4.2.2 ADF test Results

The results of Augmented Dickey Fuller (ADF) test indicated that the data series were not found to be stationary at level, or I (0) except GDP Growth Rate which is only stationary at I (0). Other variables, including Foreign Direct Investment(FDI), Exchange Rate (ER), Imports (IMP), Exports (EXP), Corruption (COR) and Political Stability (PS) are stationary at I(1). The detailed analysis of unit root test is shown in Appendix-I.

The data has been assessed by using Augmented Dickey Fuller (ADF) test for unit roots where to find out that the variables are concluded to be integrated in the same order. The data collected for the period of 22 years from 1991 to 2012. Time Series data has the property of non-stationary in levels. The process of using the Augmented Dickey Fuller (ADF) to test unit root for stationarity test is shown in table 4.1.

Table 4.1  
*ADF Unit Root Test Results using the Trend and Intercept*

No.	Variable	Level	1st difference
1	Foreign Direct investment	0	S
2	GDP Growth Rate	S	-
3	Exchange Rate	0	S
4	Import	0	S
5	Export	0	S
6	Inflation	0	S
7	Corruption Control	0	S
8	Political Stability	0	S

#### 4.3 Descriptive Analysis

The descriptive analysis was conducted in order to describe the general situation of FDI inflows. Therefore, for macroeconomic variable such as GDP growth rate,

Exchange rate, Import , Export and Inflation and business environment such as Corruption Index and also Political Stability

#### 4.3.1 Descriptive Statistics and Test of Normality

The data have been analysed to fulfil the assumptions of regression analysis.

Table 4.2  
*Descriptive Statistics of the Constructs (n=22)*

	<b>FDI</b>	<b>GDPG</b>	<b>IMP</b>	<b>INF</b>	<b>PS</b>
Mean	17119.64	5.888016	99288.09	2.839153	0.245795
Median	14789.95	6.218018	80861.75	2.852713	0.238750
Maximum	37326.40	10.00270	196645.3	5.440782	0.579500
Minimum	2105.000	-7.359415	36648.50	0.583308	-0.355000
Std. Dev.	8673.404	4.127368	47034.58	1.378658	0.242089
Skewness	0.647385	-1.764766	0.648311	0.274990	-0.583838
Kurtosis	2.933025	6.169538	2.338842	2.128442	2.910258
Jarque-Bera	1.540837	20.62827	1.941826	0.973584	1.257227
Probability	0.462819	0.000033	0.378737	0.614595	0.533331
Sum	376632.1	129.5363	2184338.	62.46137	5.407500
Sum Sq. Dev.	1.58E+09	357.7385	4.65E+10	39.91464	1.230750
Observations	22	22	22	22	22

Table 4.3  
*Descriptive Statistics of the Constructs (n=22)*

	<b>COR</b>	<b>ER</b>	<b>EXP</b>
Mean	5.065152	3.277273	116853.4
Median	5.100000	3.350000	96144.75
Maximum	5.653333	3.900000	228074.2
Minimum	4.300000	2.500000	34350.00
Std. Dev.	0.350944	0.525476	60263.81
Skewness	-0.512614	-0.312188	0.517536
Kurtosis	2.930851	1.523997	2.046824
Jarque-Bera	0.967886	2.354394	1.814924
Probability	0.616348	0.308141	0.403547
Sum	111.4333	72.10000	2570774.
Sum Sq. Dev.	2.586394	5.798636	7.63E+10
Observations	22	22	22

#### **4.4 Pearson Correlation Analysis**

Pearson Correlation Analysis (PCS) has been conducted to show the relationship between FDI inflow, macroeconomic and business environment. This analysis provides an overview of the relationship between FDI inflows, macroeconomic variables and business environment variables in affecting FDI in Malaysia. This also shows that there is positive correlation between the dimension of FDI inflows, macroeconomics variables such as GDP Growth Rate, Exchange Rate, Export, Import and Inflation. This descriptive statistics correlation also does not provide information regarding casualty but only provide insight and evidence that both variables are directly related. The details are shown in Table4.6

The results of correlation show that some of the variables such as exchange rate, exports, import, corruption index and political stability were found to be significant at 0.01 and fewer at 0.05, level of significance. Two variables inflation and GPD growth rate were found to be insignificant as  $p > 0.05$ . This indicates that foreign direct investments (FDI) have significant relationship with exchange rate, exports, import, corruption index and political stability. While foreign direct investment (FDI) has no relationship with inflation and GDP growth rate. The results also support the evidence of relationship between FDI with macroeconomic variables and business environment variables.

Table 4.4

*Pearson Correlation Analysis*

		<b>COR</b>	<b>ER</b>	<b>FDI</b>	<b>INF</b>	<b>EXP</b>	<b>IMP</b>	<b>PS</b>	<b>GDP G</b>
<b>COR</b>	Pearson Correlation	1	-.413	-.227* *	.363	-.728**	-.689**	.342	.389
	Sig. (2-tailed)		.063	.003	.106	.000	.001	.129	.082
	N	21	21	21	21	21	21	21	21
<b>ER</b>	Pearson Correlation	-.413	1	-.149* *	-.436*	.346	.249	.189	-.600**
	Sig. (2-tailed)	.063		.048	.048	.125	.275	.412	.004
	N	21	21	21	21	21	21	21	21
<b>FDI</b>	Pearson Correlation	-.227**	-.149* *	1	.161	.696**	.744**	.343*	.266
	Sig. (2-tailed)	.003	.048		.485	.000	.000	.023	.244
	N	21	21	21	21	21	21	21	21
<b>INF</b>	Pearson Correlation	.363	-.436*	.161	1	-.227	-.216	-.227	.036
	Sig. (2-tailed)	.106	.048	.485		.323	.346	.322	.876
	N	21	21	21	21	21	21	21	21
<b>EXP</b>	Pearson Correlation	-.728**	.346	.696**	-.227	1	.991**	-.258	-.218
	Sig. (2-tailed)	.000	.125	.000	.323		.000	.259	.342
	N	21	21	21	21	21	21	21	21
<b>IMP</b>	Pearson Correlation	-.689**	.249	.744**	-.216	.991**	1	-.282	-.145
	Sig. (2-tailed)	.001	.275	.000	.346	.000		.215	.532
	N	21	21	21	21	21	21	21	21
<b>PS</b>	Pearson Correlation	.342	.189	.343*	-.227	-.258	-.282	1	.110
	Sig. (2-tailed)	.129	.412	.023	.322	.259	.215		.636
	N	21	21	21	21	21	21	21	21
<b>GDP G</b>	Pearson Correlation	.389	-.600**	.266	.036	-.218	-.145	.110	1
	Sig. (2-tailed)	.082	.004	.244	.876	.342	.532	.636	
	N	21	21	21	21	21	21	21	21

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## 4.5 Regression Analysis

To test the relationship between FDI, macroeconomic variables and business environment variables, we run ordinary least square analysis. The estimator with the dependent variable FDI and macroeconomic variables in table 4.8 and business environment variables in table 4.8. In OLS the functional form for estimation has been formulated as per nature of the variables. The equation estimated is also presented as Eq.4.1 as below.

$$FDI = \alpha_0 + \beta_1 GDPG + \beta_2 ER + \beta_3 EXP + \beta_4 IMP + \beta_5 INF + \beta_6 COR + \beta_7 PS \dots$$

Eq.4.1

Table 4.5  
*Regression Analysis*

<b>Variables</b>	<b>Predictors</b>	<b>t-value</b>
GDPGR	-0.0908	-0.2107
ER	-0.7567	-2.6408**
IMP	0.2215	2.08753**
EXP	0.2776	3.6946*
INF	0.7779	0.5522
COR	-0.2164	-4.5262**
PS	0.4067	2.0741*
F value	15.7619	
F sign.	0.000021	
R <sup>2</sup>	0.7976	
Adjusted R <sup>2</sup>	0.7469	
Durban Watson	1.3658	

\* Significant at the 0.05 level; \*\* Significant at the 0.01 level

The result showed in Table 4.7, there is positive relationship between the exports and the foreign direct investment (FDI). The model summary results and value of  $R^2$ , which is 0.7975, indicated that the formulated model is about 80% of the variation in the dependent variable. The coefficient of GDPG appears insignificant as the computed value (-0.0908,  $p > 0.05$ ). This result reflects that economic growth has no impact on the inflow of foreign direct investment in Malaysia.

The coefficient for ER is negatively significant ( $\beta = -0.7567$ ,  $p < 0.05$ ). The result shows that the exchange rate has negative impact on the inflow of foreign direct investment. It indicates that as the exchange rate will increase, there will be decreased in the inflow of the foreign direct investment. The coefficient of IMP (0.2215,  $p < 0.05$ ) indicates that there is positive relationship between the foreign direct investment and Imports. An increase in the Imports will cause decrease in the foreign direct investment. If the imports will decrease, it will cause an increase in the Foreign Direct Investment. The coefficient for EXP (0.2776,  $p < 0.05$ ) is positively significant. It revealed that as exports will increase, it will also cause an increase the inflow of the foreign direct investment.

To test the relationship between Foreign Direct Investment and Business Environment variable we run ordinary least square analysis. The estimated relationship with the dependent variable, foreign direct investment (FDI) and independent variable of business environment variables is shown in table 4.9. In Ordinary Least Squares (OLS) the functional form for estimation is formulated with respect to variables. The coefficient of inflation appears as insignificant as (0.7779,  $p > 0.05$ ). Omankhanlen (2011) also found non-significant impact of inflation of FDI. This indicates that there is no effect of inflation on FDI inflow in Malaysia. Our



results are contradictory with previous studies, as inflation rate are controlled by the Malaysian government.

To find the relationship between business environment variables such as corruption control and political stability, the analysis using Ordinary Least Squares was performed. The model summary results shows that the coefficient of Corruption (COR) is negatively significant based computed value (-0.2164,  $p < 0.05$ ). This indicates that an increase in corruption will cause of decrease in the foreign direct investment. And a decrease in the corruption will be helpful to increase the foreign direct investment inflow in Malaysia. The coefficient for PS (0.4067,  $p < 0.05$ ) is positively significant. It shows that the more stable in political issue will bring more FDI inflow and if there is a decrease in the political situation will cause instability and will cause decrease in the FDI inflow.

The results for the hypothesized relationship between FDI inflow, macroeconomic variable and business environment can be concluded that among the hypothesized relationship H2, H3, H4, H6 and H7 appeared to be significant while H1 and H5 appears to be insignificant and supported by the data analyzed. The detail of the analysis is shows in table-4.8.

Table 4.8  
*Summary of Hypothesis result*

Hypothesis	Hypothesized Relationship	Sig.	Decision
H1	There is a relationship between GDP growth rate and FDI	0.226	Not Supported
H2	There is a relationship between exchange rate and FDI	-0.149*	Supported
H3	There is a relationship between imports and FDI	0.774**	Supported

H4	There is a relationship between exports and FDI	0.696**	Supported
H5	There is a relationship between Inflation and FDI	0.161	Not Supported
H6	There is a relationship between corruption index and FDI	- 0.227**	Supported
H7	There is a relationship between political stability and FDI	0.343*	Supported

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#### **4.6 Summary of the Findings**

This section reported the results and findings of the current study. These results are obtained by using the time series data for the period of 22 years from 1991-2012. The data has been analysed by using two software Eviews in order to check the data is stationary or non stationary and then further analysis using SPSS version 19.0. Detailed discussion on the construct validity was provided to control the quality of the model used for testing the hypothesis. In order to test the hypothesis, Pearson Correlation and Multiple Linear Regression were employed. The significant variables such as GDP Growth rate, Exchange rate, Import, Export Corruption index, Political stability are very important in the FDI inflow.

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATION**

#### **5.1 Introduction**

The main objective of this study is to analyse the relationship between FDI inflows, macroeconomic variables and business environment variables. The focus was to examine the relationship of FDI with macroeconomic variables, particularly GDP growth rate, exchange rate, import, export and inflation. The Business environment variables such as corruption and political stability were also tested with FDI inflow. The specific objectives of the current study were as follows:

1. To examine the relationship between macroeconomic variables (GDP growth rate, exchange rate, import, exports, Inflation) and FDI inflows in Malaysia.
2. To determine the relationship between the business environment variables (corruption control and political stability) and FDI inflows in Malaysia.

In order to achieve the above mentioned objective, this study reviewed a comprehensive literature on the variables of FDI. The review of past relevant literature, related to macroeconomic and business environment variables, reveals that the researchers have focused their attention on these factors in the context of foreign direct investment(FDI).

The data were collected for 22 years from 1991-2012, from World Bank database. The data were analysed by using the Eviews 6.0 and SPSS, which is in common, use to analyze the economic data.

## **5.2 Discussion**

The result of the analysis was discussed as below;

**To examine the relationship between macroeconomic variables (GDP growth rate, exchange rate, import, exports and inflation and FDI inflows in Malaysia.**

The detailed analysis of macroeconomic variables revealed the coefficient for GDP growth is insignificant as the computed value (-0.0908,  $p > 0.05$ ). This result reflects that economic growth is not support on the inflow of foreign direct investment (FDI) in Malaysia. As referred to the previous study (Fedderke & Romm, 2006; Mitze, 2011), the results is inconsistent. Besides, there is positive significant relationship between FDI inflow and economic growth. Our results are insignificant as there was great variation in the economic growth trend. In year 2007 and 2009 the economic growth was negative in figures (-7.3594) and (-1.5136) but was positive in year 2001(0.5176) as reported by World Bank database. This is due to (give reason WHY)

The coefficient for Exchange rate is negatively significant ( $\beta = -0.7567$ ,  $p < 0.05$ ). The result shows that the exchange rate has a negative impact on the inflow of foreign direct investment. These results are consistent and supported by previous studies by Froot and Stein (1991), Blonigen (1997) and Kiyota and Urata (2008). They also reported that there is negative relationship between exchange rate and FDI inflows, as FDI inflows are negatively correlated with the external value of the US dollar.

As for inflation, the result shows there is no relationship between inflation and foreign direct investment. INF is (0.7779,  $p > 0.05$ ).

The coefficient for Exports (0.2776,  $p < 0.05$ ) is positively significant and indicates that there is positive relationship between exports and FDI inflows in Malaysia. These results are consistent and supported with previous studies by Alguacilet al. (2002) and Pacheco-López (2005). This result indicates the exports have positively related with FDI inflow, as FDI will increase number of production plant and facilities, the in results boost up the production capacity of the industries. This increased production will increase the possibility to export more. And exports will also encourage other investors to come and invest in Malaysia.

The coefficient of Imports (-1) (0.2215,  $p < 0.05$ ) indicates that there is positive relationship between imports and foreign direct investment (FDI). The increase in imports is based on the industrial requirements on raw material for production purposes, as FDI depends on the production plant and feasibilities of the availability of infrastructure.

**To determine the relationship between the business environment variables (corruption index and political stability) and FDI inflows in Malaysia.**

This relationship between Business environment variables and FDI inflows is very important in any economy. The feasibility and easiness of business depend on the factors that affect the business expansion and growth. In results of the analysis, we found that there is negative relationship between corruption index and FDI inflow base on the computed value (-0.2164,  $p < 0.05$ ). If the corruption is low, then there is a more tendency of FDI inflows than as compared to higher numbers of corruption

index in the country. These results are supported with the previous study by Habeb and Zurawicki (2002), Houston (2007), Waleheen and Stansel (2007).

Therefore, the political stability and FDI inflow have a positive significant relationship base on the results of the analysis (0.4067,  $p < 0.05$ ). If the political situation in Malaysia is stable, the investors will feel secure and will encourage them to invest in Malaysia. Based on the analysis, if we increase the political stability it will also increase in the FDI inflow.

### **5.3 Contributions of the study**

This study provides an insight regarding the key element of good economy that is foreign direct investment in Malaysia. This study included macroeconomics variables and also business environment variables and test their effect on FDI inflow Malaysia. This study extends the boundary of existing literature by combining the macroeconomic variables and business environment for FDI inflow using Ordinary least square (OLS) regression analysis. This study can claim the significance by including significant relevant contributions to the literature besides entailing pragmatic suggestions for the considerations of the policy makers as well. The gist of the contributions of this study is presented in the following sub-sections.

#### **5.3.1 Theoretical Contribution**

First, in the theoretical perspective of this study, it highlighted the corruption index and political stability for foreign and domestic investor in this study. This study especially includes macroeconomic variables such as economic growth, import, exports and exchange rate, and diverse literature on these variables from previous study also reported in the present study.

Second, this study emphasized the vital role of business environment situation for inflow of FDI in perspective of a developing country and an emerging market such as Malaysia. It contributes to the management and economic literature, the impact of corruption and also the political stability on the FDI inflows, there has been glaring disagreement that makes many academics and policy practitioner have questioned the appropriateness of the variables that will affect the FDI inflows in the host country.

Third, it also revealed the joint effect of both macroeconomics and business environment variables on FDI inflows was evidently stronger than otherwise. It was suggested that macroeconomic stability with the attractive business environment will attract more FDI inflows in the host country.

### **5.3.2 Practical Contribution**

The study provides practical insight on how both macroeconomics and business environment variables can enhance the FDI in to the country. The result gathered from this study, it has an important contributions and policy implication for practitioner and policy-maker, which can be indicated in the following manner.

Firstly, base on the findings of the study, the government of Malaysia should make an effective plan to enhance business opportunity in the country. A specific short and long term plan can spell out referring to policies, opportunities and incentives that are need to put into consideration in order to attract more FDI inflows.

Second, the policy maker should endeavour to establish more friendly and reliable business environment in the country. Besides, the government should construct the economic zone with security and support in order to facilitate investment activity in the industrial area.

Thirdly, the government of Malaysia should provide attractive package of low tax strategy and construct good secured industrial zone. Therefore, the investors feel more secure to operate their business in the country. The change of political situation in the country should never affect the foreign investment company's law and comparable with developed country.

### **5.3.3 Policy Implication**

The policy makers and the government of Malaysia should visualise general minimum programmes with the integrated terms of monetary-fiscal policy mix in devising the macroeconomic policy with the following key ingredients:

- Stabilizing the exchange rates.
- Taking effective measure to control corruption
- Substantial infrastructure development through appropriate public sector investments to attract FDI
- Stimulating and facilitating investments on nation-wide scale.
- Attracting foreign direct investment (FDI) in a pre-defined way.
- Containment of fiscal and current account trade deficits.

It is obviously a need for proactive policies to soften the FDI inflows in Malaysia and take more effort in encouraging more domestic and foreign investments in foreign exchanged growth oriented. Thus, in order to encourage



the domestic and foreign investments, Malaysia should revamp the macroeconomics policy in the future course of direction. Barrow (1999) and Przeworki (2004) have come out with some practical measures that should be considered of the Government as prior stage to enhance both domestic and foreign investments activity in the country, such;

- **Identifying of potential Investors and sectors**

In order to promote foreign investments, the government and the policy makers should identify and pursue investors from untapped potential countries, look towards upcoming UAE, China , Japan, Korea and also Brunei. Besides, the government should also identify new sectors for investment such as mining and quarry, power and energy sectors, construction and building infrastructures, new IT development, Tourism ,etc.

- **Improvement in infrastructure**

As to be on par with other developed economies of Southeast Asia, the government should invest more in the field of physical infrastructure and also on education. For example, more international school and collages

- **IT Sector Foreign Investment**

The government should invite multinational companies to operate their branch office in the country. It will enhance the growth of IT sectors and transfer of expertise and knowledge among local employees.

- **Tourism Sectors**

In Malaysia, there are some several places that need to be modernised in the process of development. Tourism Ministry should promote the

historical places to the other western and eastern country and also its beautiful beach scenery can be a major tourist attraction in the region

- **Agriculture Area**

Besides industrial area, the government also need to consider modernizing of the agriculture area where need to introduce the new technology in agricultural sector and rural agro-base industries. FDI may be solicited in this direction.

#### **5.4 Recommendations for Policy Makers**

Firstly, this study can help the policy makers to understand the issues related to foreign direct investment inflow in Malaysia. The results computed by this study will help to improve the business position in the country by attracting the foreign direct investment in Malaysia. Malaysia government can make some effective management policies to attract and enhance the business opportunities in the Malaysia.

Secondly, this study also highlighted the importance of political stability in lined with the new economic growth theory. The results show that political stability can be a tool to facilitate the initiative to change the business and economic situation. Policy makers take this challenge to provide supported policies to foster the economic growth by political stability in the country.

Thirdly, this study also provides an insight of the corruption and exchange rate importance in respect of attracting FDI inflow in Malaysia. The corruption discourages the foreign investors and local investor both to invest in the business. This study suggested that government of Malaysia should take effective measures and actions to reduce the corruption rate in the country as it is important factor in attracting the FDI inflow. The government of Malaysia also device some strategies to

take care of the exchange rate and this should be somehow adjusted in a manner that may not caused of discouragement for the foreign investors. In short, the Malaysian policy-makers should endeavour to establish a more friendly and reliable business environment in the country.

Lastly, for those multinational companies (MNCs) that have established structured training programmes investing here, they have to transfer the key competencies to local companies also for small and medium industries that support with the larger workforce.

## **5.5 Limitations of the Study**

At various analytical stages, the study is marred by the paucity of data collected from the various reporting agencies. There has been a specific problem of finding and in comparing data from different sources. The time series data used for different variables and the averages have been lacking in homogeneity and accuracy to some extent. However, no proper methods were available to isolate the effect of FDI to support this statement.

This study incorporate limited data for 22 years from 1991-2012 only. This study only take in account very few variables related to the macroeconomic variables and business environment. This study also was confined to overall perspective of Malaysia on macro level and talk in the perspective of macroeconomic variables and their movement with business variables. This study does not include any discussion related to entrepreneurial perspective and business perspectives.

## **5.6 Directions for Future Research**

There is a need to include the other variables that are not included in the study. The variables related to attracting the investors such as investor protection, capital outlay and cost of doing business can be considered in the future studies in order to capture the effect of these variables on foreign direct investment and intention of the investors to invest in Malaysia. By and large, the missing link in the present study can inspire further in-depth and enlarge study on the issues of FDI and economic growth of Malaysia in the future course of direction.

## **5.7 Conclusion**

This study is a pioneer attempt to examine the relationship between the macroeconomics variables and business environment variables on FDI inflows in Malaysia the using of time period from 1991 to 2012. The study substantially contributes the existing literature of FDI inflows in the context of developing country like Malaysia. The study main finding indicates that there is no relationship between GDP Growth and Inflation with FDI inflows in Malaysia. But it shows that other macroeconomics variable and business environment (Exchange Rate, Import, Exports and political stability) have relationship with FDI inflows in Malaysia.

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