# Foreign Labor Entry: Effect on Unemployment, Economic Growth and Security Implication in Malaysia.

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By

### MALARVILI A/P LOGANATHAN

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Pusat Pengajian Siswazah Jabatan Hal Ehwal Akademik (Centre for Graduate Studies) Academic Affairs Department UNIVERSITI UTARA MALAYSIA

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Foreign Labor Entry: Effect on Unemployment, Economy Growth and Security Implication in

Malaysia

### ABSTRACT

A foreign worker is a person who works in a country other than the one of which he or she is a citizen. Therefore, attendance foreign workers in Malaysia are to help the country overcome the shortage of workers. In fact, it helps to achieve economic growth. Significantly, entry of foreign workers was since the late 1980s. Initially, most of them work as laborers in the formal sector, but then many are turning to business. It directly effect on unemployment rate, economy growth and security implication in Malaysia. The general objective of this study is to analyze the foreign labor entry: effect on unemployment, economy growth and security implication in Malaysia. This study will use a time series data to test weather rises in foreign labor effect on unemployment rate and economic growth in Malaysia by Cointegration Test, Granger Casuality Test and Ordinary Least Square Test. Data was collected from Department of Statistic Malaysia, royal Malaysia Police, Economic Planing Unit and World Bank. The results show that, there are both positive and negative impacts on economy growth. Therefore national policies on employment of foreign worker are suited to the need of country. Government spends more expenses to establish new security implication to overcome this which one of losses to the country. In conclusion, despite the presence of these foreign labors can help countries overcome labor shortages and help achieve the economic growth rate is fixed cause problems.

### ABSTRAK

Kehadiran pekerja asing diakui dapat membantu negara mengatasi masalah kekurangan pekerja. Malah ia turut membantu mencapai kadar pertumbuhan ekonomi. Kemasukan buruh asing ketara sejak akhir 1980-an. Pada awalnya, kebanyakan mereka bekerja sebagai buruh kasar di sektor formal tetapi kemudian ramai yang beralih menjadi pengusaha. Promosi Malaysia sebagai negara yang mempunyai kadar upah rendah, mungkin tidak lagi sesuai. Upah pekerja Malaysia tidak lagi rendah secara relatif. Yang rendah ialah upah pekerja asing yang bekerja di Malaysia. Malaysia wajar dipromosikan sebagai sebuah negara yang sedang beralih kepada aktiviti intensif teknologi dan nilai tambah lebih tinggi, dengan pengambilan buruh asing dilaksanakan secara bijaksana dan terpilih. Tajuk kertas kerja ini adalah, Kemasukan Buruh Asing: Kesan keatas Ekonomi serta Pengganguran dan Implikasi Polisi Sekuriti di Malaysia. Kajian kertas kerja ini secara khususnya bertujuan untuk menyelidik kesan kemasukan buruh asing di negara Malaysia. Kaedah ekonometrik telah digunakan untuk manganalisis kemasukan buruh asing keatas tahap ekonomi dan kesan pengganguran d Malaysia. Keputusan analisis menyokong bahawa kemasukan buruh asing memang memberikan keburukan kepada negara Malaysia walaupun ia memberikan galakan kepada output negara tetapi kerajaan mesti tegas dalam mengurangkan jumlah tenaga buruh asing. Lantaran itu, kertas kerja ini juga memberi beberapa cadangan langkah dalam mengatasi masalah ini.

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## **TABLE OF CONTENTS**

PERMISSION TO USE	i
ABSTRACT	ii
ABSTRAK	iii
ACKNOWLEDGEMENT	iv
LIST OF TABLES	viii

## Chapter 1: Introduction

1.1	Foreign Labor Entry: Effect on Unemployment, Economy Growth and Security Implication in Malaysia	
	1.1.2 Unemployment Phenomena in Malaysia	5
	1.1.3 Economic Growth	
1.2	Problem Statement	9
1.3	Objective of the study	11
1.4	Method and Scope of the study	11
1.5	Organization of study	12

## Chapter 2: Literature Review

2.1	Theory and Concept of Foreign Workers	13
2.2	Foreign Labor effect on Economic Growth	16
2.3	Foreign Labor effect on Unemployment Rate	19
2.4	Security Implication towards Foreign Labors	21
2.5	Conclusion	23

## Chapter 3: Methodology and Data

3.1	Specif	fication Model	24
3.2	Empir	rical Model	27
3.3	Descr	iption of Key Variable	28
	3.3.1	Foreign Labor	28
	3.3.2	Gross Domestic Product (GDP)	29
	3.3.3	Unemployment Rate	30
	3.3.4	Crime	30
3.4	Estim	ation Procedure	31
	3.4.1	Unit Root test	31
	3.4.2	Co- Integration test	32
	3.4.3	Granger Causality test	36
3.5	Data		37
3.6	Concl	usion	37

## Chapter 4: Result and Discussion

4.1	Preliminary Analysis	39
	4.1.1 Unit Root test	39
4.2	Co- integration and Johensen test	42
	4.2.1 Johensen Co integration Test	42
4.3	Granger Causality test	44
4.4	Ordinary Least Square	46
4.5	Summary	51

## Chapter 5: Conclusion

5.1	Summary	53
5.2	Conclusion	53
5.3	Policy Implication	54
5.4	Limitation of the study	59
5.5	Suggestion for further study	60

## LIST OF TABLES

Table 4.1(a) Unit Root Test: Level	40
Table 4.1(b) Unit Root Test: First Difference	41
Table 4.2 (a) GDP and Unemployment.	43
Table 4.2(b) GDP and Foreign Labor.	44
Table 4.2(c) GDP and Crime	45
Table 4,2 (d) Unemployment and Foreign Labor	46
Table 4.3 (a) Granger Causality test.	47
Table 4.3 (a) Ordinary Least Square test.	49
Table 4.3 (b) Ordinary Least Square test.	50

### **CHAPTER 1**

### **INTRODUCTION**

## 1.1 Foreign Labor Entry: Effect on Unemployment, Economy Growth and Security Implication in Malaysia.

The impact of international labor migration in economics development was discussed by J. Edward Taylor (2006) and Robert E. B. Lucas (2008):

"The international migration of labor is an important component of globalization and economic development in many countries. The number of international migrants, or people residing in a country other than their country of birth, has increased more or less linearly over the past years. International migration raises both hopes and concerns for the international migrants come. The migrants include millions of highly educated people from countries in which human capital is relatively scarce. On average, each of the world's international migrants is sending home more remittances today than in the past. There is not a single convincing explanation as to why this is so, but it has important implications for economic development. There is little information on where, within countries, the international migration originates and remittances flow. Data from the few national income and expenditure surveys and various regional surveys that gather this information reveal that both migration and remittances are concentrated within, as well as among, countries. This means that international migration affects some countries, and within these countries, some regions, more than others. Researchers used to ask whether migration has a positive or negative effect on development. Today they are more likely to ask: "Why does international migration seem to promote economic development in some cases and not in others?" Negative effects of international migration on developing countries have received considerable attention in both academic research and the press. These include the cost of losing labor and human capital to foreign labor markets, especially the "brain drain". The impacts of international migration appear to be greater and considerably more complex than simple remittance numbers suggest. The newly uncovered links between international migration and development potentially open the way for a variety of new policy interventions to increase migration's contribution to economic development. These movements take many forms though any distinction between migrations for labor purposes, as opposed to other reasons, is blurred at best. In particular, temporary migrations are an important aspect of today's world. There are economic implications of these movements.

When we refer to Malaysia, the issue of illegal labor immigrants is increasing day by day and becoming a problem for the country. Foreign workers come mainly from countries with internal problems such as Indonesia, the Philippines, Bangladesh, India, Myanmar, Vietnam and the latest is from China. Based on statistic up to June 30, 2007 issued by the Immigration department, the number of foreign workers reached 1.91 million. That amount does not include

more than 400,000 illegal immigrants believed to enter the country illegally and some 10,000 detainees at the migration depot.

Furthermore, increase of foreign worker is expected to increase dramatically following the implementation of various development projects during the Ninth Malaysia Plan (RMK-9). Statistical projections show the rate of population increase by 2009 foreign workers will be more than two million people from the country's population is expected to increase to 28,306 million projects. Deputy Human Resources Minister Datuk Abdul Rahman Bakar, said the increase in foreign worker is inevitable, especially in the RMK-9 which requires more than 1.2 million new workers to ensure that all sectors can move smoothly. In addition currently, on 30<sup>th</sup> September 2010, Malaysian Prime Minister Datuk Seri Najib Razak in an effort to take Malaysia into high-income countries through the new Economic Model (NEM) in 2020 said that recruitment of too many of less skilled foreign workers is no longer relevant, The Star newspaper (November 2010).

Besides that, there are some factors in Malaysia which attracted foreign worker to migrate in our country. Foreign workers more interested in the prosperity of our country and on its economic stability. Local labor shortage is also an opportunity for people of other countries to make living in Malaysia. Hence, Home ministry secretary-general Azahar Raja Abdul Manap had announced that the government was planning a drastic reduction in the number of foreign workers, with at least 200,000 likely to be sent home by next year. The Star newspaper said and many local residents believe that the problem of foreign workers should be controlled so that it does not become more serious.

It is undeniably that sometimes foreign workers will help to overcome the shortage of labor in Malaysia labor market. Unfortunately, many cases that happen awakened of the notion that the foreign workers can act violently. Some parties often blames on youngsters for being too choosy in finding the job, but they never tried to understand the problems of the youths. Youths are very choosy in getting a job because of the employer themselves. They won't pay the local worker with a reasonable salary. Of course employers are more willing to employ more foreign workers due they can pay with a cheaper salary and there are no any subject to EPF and Socso which is more profitable for them.

Local residents are sometime ignored by the excess of foreign workers, where many local citizens are adopting foreign worker in their daily dealings such as maids, baby sitting or as gardener. Instead, the presence of foreign workers has lead to many criminal cases such as murder, robbery, rape, burglary, thefts and many more which gives disadvantages to our country. Currently, on 19<sup>th</sup> January 2011 there are issue of International Baby Trafficking Syndicate in Malaysia after Malaysian's police rescuing three babies and arresting nine people which most of them are foreigners. According to the Immigration Department in collaboration with the Police Department, there were 362,958 of foreign workers who were detained and expelled throughout the country for committing various offenses in the country.

Hence, the arrival of foreign works will gives an advantages and the same time will lead to a disadvantages which can be exploited the Malaysian development. The government playing a major role to overcome the issue, they should review from all the aspects of economic, politic and social before implement a very good policy. The government should enforce the laws more strictly. This is because many foreign workers are illegal immigrants who sneak with fake document. Immigration should be tougher for illegal immigrants so that they will not dare to act further. The army of state border must also under control at all time to prevent them breaking them through the sea.

### 1.1.1 Unemployment Phenomena in Malaysia

Unemployment, as defined by the International Labor Organization, occurs when people are without jobs and they have actively looked for work within the past four weeks. The unemployment rate is a measure of the prevalence of unemployment and it is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in the labor force.

In addition to these three comprehensive theories of unemployment, there are a few types of unemployment that are used to more precisely model the effects of unemployment within the economic system. The main types of unemployment include structural unemployment which focuses on structural problems in the economy and inefficiencies inherent in labor markets including a mismatch between the supply and demand of laborers with necessary skill sets. Structural solutions arguments emphasize causes and related to disruptive technologies and globalization. Discussions of frictional focus on voluntary decisions to work based on each individual's valuation of their own work and how that compares to current wage rates plus the time and effort required to find a job. Causes and solutions for frictional unemployment often address barriers to entry and wage rates. Behavioral economists highlight individual biases in decision making and often involve problems and solutions concerning sticky wages and efficiency. There are technological unemployment which caused by the replacement of workers by machine or other advance technology.

Unemployment may have advantages as well as disadvantages for the overall economy. Notably, it may help avert runaway inflation, which negatively affects almost everyone in the affected economy and has serious long-term economic costs. However the historic assumption that full local employment must lead directly to local inflation has been attenuated, as recently expanded international trade has shown itself able to continue to supply low-priced goods even as local employment rates rise closer to full employment.

The inflation-fighting benefits to the entire economy arising from a presumed optimum level of unemployment have been studied extensively. Before current levels of world trade were developed, unemployment was demonstrated to reduce inflation, following the Phillips curve, or decelerate inflation. following the natural unemployment theory. to rate of Beyond the benefits of controlled inflation, frictional unemployment provides employers a larger applicant pool from which to select employees better suited to the available jobs. The unemployment needed for this purpose may be very small, however, since it is relatively easy to seek a new job without losing one's current one. And when more jobs are available for fewer workers (lower unemployment), it may allow workers to find the jobs that better fit their tastes, talents, and needs.

Optimal unemployment has also been defended as an environmental tool to brake the constantly accelerated growth of the GDP to maintain levels sustainable in the context of resource constraints and environmental impacts. However the tool of denying jobs to willing workers seems a blunt instrument for conserving resources and the environment reduces the consumption of the unemployed across the board, and only in the short-term. Full employment of

the unemployed workforce, all focused toward the goal of developing more environmentally efficient methods for production and consumption might provide a more significant and lasting cumulative environmental benefit and reduced resource consumption. If so, the future economy and workforce would benefit from the resultant structural increases in the sustainable level of GDP growth.

The Malaysian Government, through various tripartite forums, have constantly highlighted and promoted the importance of continual improvement and learning. Workers must be actively involved in upgrading their knowledge and skills. Unemployment is a problem that we have to control through effective labor management and human resource policies. The negative impact of globalization and external shocks of the international economic system must be mitigated by prudent government interventions. Consequently, underpinning the efforts to combat unemployment is the capacity of the workforce to compete through increasing productivity and working in harmony with the other factors of production. The strategic thrust in addressing unemployment is economic growth and development, from blog of Hafiz (2007).

### **1.1.2 Economic Growth in Malaysia**

Economic growth is the increase of per capita gross domestic product (GDP) or other measure of aggregate income, typically reported as the annual rate of change in real GDP. Economic growth refers to the value and services produced and does not account for working conditions, education, political and social conditions, depletion of nonrenewable resources or environmental degradation. Recessions and depression are periods of negative growth. Economic growth is primarily driven by improvements in productivity, which involves producing goods and services with fewer inputs of labor, capital, energy and materials per unit of production. Other components of growth are the hours worked and demand. Population growth contributes to economic growth on a national level, but population growth by itself does not improve living standards.

Some major historical sources of productivity were mechanization, transportation infrastructures (canals, railroads and highways) new materials (steel) and power, which includes steam and internal combustion engines and electricity. Other productivity improvements included mechanized agriculture and scientific agriculture including chemical fertilizers and livestock and poultry management, and the Green Revolution. Interchangeable parts made with machine tools powered by electric motors evolved into mass production, which is universally used today.

Just a few years after independence from the United Kingdom in 1957, had the World Bank's country-classification system been in place, Malaysia would have qualified as a middle-income country. Since then, it has continued to enjoy relative prosperity, initially as a commodity exporter (rubber, tin, then palm oil and petroleum), with total income rising at 6–7 percent each year from 1970 until 2000. As a result, the number of poor persons (that is, those consuming less than the purchasing power parity US\$1 per day metric) has fallen to fewer than a million, or 3.9 percent of the population of 26.2 million people (compared to about half of the population in 1970).

The Gross Domestic Product (GDP) in Malaysia expanded at an annual rate of 2.40 percent in the second quarter of 2010 from the previous quarter. From 2000 until 2010,

Malaysia's average quarterly GDP Growth was 1.18 percent reaching an historical high of 5.70 percent in September of 2009 and a record low of -7.80 percent in March of 2009. Malaysia is a rapidly developing economy in Asia. Malaysia, a middle-income country, has transformed itself since the 1970s from a producer of raw materials into an emerging multi-sector economy. The Government of Malaysia is continuing efforts to boost domestic demand to wean the economy off of its dependence on exports. Nevertheless, exports particularly of electronics remain a significant driver of the economy. This page includes, Malaysia GDP Growth Rate chart, historical data and the latest data as well.

### **1.2 Problem Statement**

The entries of foreign labors have evolved into positive and negative impact on the overall economic system. On the other hand many researchers show that legal foreign labors will help to provide clear strategic focus to develop and promote the expansion of the economic growth in Malaysia. Meanwhile, because of the illegal foreign labor it's really gives a negative impact especially in social issues which losses the government to overcome it by spending more on the policies to catch them to protect our nation. Which of these two variables (unemployment & economy growth) are most affected by the entries of foreign labors? This project paper is mainly will answer weather the foreign labors are important to Malaysia's economy. Moreover it's undeniable that the some of the foreign labor enter Malaysia by using fake document, so this paper will help by giving the suggestion to all parties especially government to overcome it. Below is the reliable graph of trend which was collected from accurate web-site in explaining on foreign labor and its effect to the economy growth in Malaysia.



Figure 1.1: Legal Foreign Labors, Unemployment, GDP and Numbers of Crime in Malaysia from the year 1999 to 2010

Sources: World Bank, Royal Malaysia Police and Economic Planning Unit

### 1.3 Objective of the Study

The general objective of this study is to analyze the effect on unemployment rate and economy growth in Malaysia due to entries of foreign labor which becoming a critical issue nowadays. The specific objectives of this study are as follows:

- 1) To investigate the impact on unemployment rate due to the entries of foreign labor.
- 2) To investigate the impact on economy growth due rising of foreign labor.
- To help the government by giving suggestion on security implication to overcome negative issue of foreign labor especially those who are illegally cross the border to Malaysia.

#### 1.4 Method and Scope of Study

Information concerning about contribution of foreign labors to the economy growth especially in GDP and the number of legal foreign labors are respectively collected from (www.epu.gov.my) and (www.worldbank.com.my) where it's influences on unemployment rate in Malaysia are gather by the data from (www.statistic.com.my). Besides that, in order to identify the negative impact of foreign labors on social activities, the crime data was collected from (www.rmp.gov.my). Hence, all of this data will help in analyzing the relationship between unemployment rate in Malaysia. The OLS analysis will be conducted by using time series data to investigate the impact of foreign workers. All the data are respectively from relevant websites

and the data were investigated from the30 years from 1881 to 2010. Other data sources include the entire article related to this topic.

### 1.5 Organization of the Study

The outlines of the following chapters in this paper are as follows. Chapter Two provides a review of the existing literatures those are relevant to the impact of Foreign Labor Entries on Unemployment and Economic Growth in Malaysia, furthermore in this chapter there will be article review regards on security implication which adopt by other countries in reducing the numbers of foreign workers. Chapter Three presents the methodology of the study which presents the calibration of the model. This chapter describes the theoretical consideration, model specification, variables and data sources. Chapter Four presents the findings of the research whereby it shows the simulation results in comparison with the reality Finally, Chapter Five reveals the policy implications and summarizes the conclusions.

### **CHAPTER 2**

### LITERATURE REVIEW

This chapter reviews the previous studies, the positive and negative impact of foreign workers which will discover by analyzing the relationship between the foreign labors with the economy growth and unemployment rate. This chapter is organized into four sections. Section one discusses of theory and concept of foreign labor. Next section discusses the impact on economy growth (GDP) due to the expansion of foreign workers in economy. Section three discusses the effect on unemployment rate among local resident due to the foreign labor entries. Furthermore, in section four discusses the strategies that taken by other countries in overcome the foreign labor issue. The last section concludes.

### 2.1 Theory and Concept of Foreign Worker

From 1820 to 1930, the United States received about 60% of the world's immigrants. Population expansion in developed areas of the world, improved methods of transportation, and U.S. desire to populate available space were all factors in this phenomenon. Through the 19th cent., the United States was in the midst of agricultural, then industrial, expansion. The desire for cheap, unskilled labor and the profits to be made importing immigrants fueled the movement. Immigrants were largely responsible for the rapid development of the country, and their high birthrates did much to swell the U.S. population. Often, however, immigrants formed distinct ethnic neighborhoods, tending to remain somewhat isolated from the wider culture. Frequently exploited, some immigrants were accused by organized labor of

lowering wages and living standards, though other groups of immigrants rapidly became mainstays of the labor movement. Opposition was early manifested by such organizations as the Know-Nothing movement and in violent anti-Chinese riots on the West Coast.

Restrictions placed on immigration were often based on race or nationality. There were also restrictions against the entrance of diseased persons, paupers, and other undesirables, and laws were passed for the deportation of aliens. The first permanent quota law was passed in 1924; it also provided for a national origins plan to be put into effect in 1929. In 1952, the Immigration and Nationality Act (the McCarran-Walter Act) was passed; while abolishing race as an overall barrier to immigration, it kept particular forms of national bias. The act was amended in 1965, abolishing the national origins quota. Despite overall limits, immigration to the United States has burgeoned since 1965, and the 1980s saw the highest level of new immigrants since the first decade of the 20th cent. In 1986, Congress passed legislation that sought to limit the numbers of undocumented or illegal aliens living in America, imposing stiff fines on employers who hired them and giving legal status to a number of aliens who had already lived in the United States for some time. The Immigration Act of 1990 raised the total quota for immigrants and reorganized the preference system for entrance. The 1996 Illegal Immigration and Reform Responsibility Act led to massive deportations of illegal immigrants. Its provisions were later softened under political and legal attack, but a stricter approach to immigrants in general was adopted by the government following the Sept. 11, 2001, terror attacks.

Entry of foreign workers into a country for the purpose of permanent or temporary residence by citizens of other countries. Immigration has economic causes (the importation of a labor force or the entry into countries with more favorable working conditions, a higher standard

of living, etc.), military causes (the capture of foreign lands and their military colonization), and political causes (flight from political, national, racial, religious, and other types of persecution, the exchange of national minorities among states, etc.).

Immigration has played a very important role in settling certain parts of the world and in forming the population of many of the world's countries. Immigration has a vital influence on population dynamics; its demographic consequences are conditioned not only by the number of immigrants but also by their sex and age structure, there is a noticeable predominance among immigrants of young and middle-aged people and of men. Immigration leads to a mixing of various ethnic groups in the population, as a result of which new nations and nationalities are formed.

Immigration is characteristic of all historical periods. An enormous influence on the formation of the population of Eurasia was brought about by the migrations that have taken place during the past 2,000 years, such as the Great Migration of peoples throughout Europe (fourth to seventh century) and the migrations connected with the Arab conquests (seventh and eighth centuries) and with the expansion of the Turks and Mongols (11th to 17th century). The era of the great geographical discoveries (from the mid-15th to the mid-17th century) laid the foundation for the extensive growth of intercontinental migrations, for the most part from Europe to other parts of the world, primarily to America and Australia.

During the 20th century the pace of migration has not slackened, although the migrations themselves have acquired a different aspect in a great number of instances, such as the enormous population shifts connected with the two world wars; the resettlement of more than 16 million persons brought about by the partition of British India into two independent states India and Pakistan; and the migrations connected with the resettlement of Jews in Israel, as well as the flight and ousting of Arabs. At the same time there are still significant shifts of population for economic reasons. Since World War II (1939–45) the immigration of a labor force into the developed countries of Western Europe has taken place on a wide scale (the number of such immigrants has reached 8 million, including 3.4 million to France, 2 million to the Federal Republic of Germany, 1 million, that is, 16 percent of the country's population to Switzerland, and so forth). The countries that are supplying the immigrants are Spain, Italy, Portugal, Greece, Turkey, and the countries of North Africa, information gain from encyclopedia.

### 2.2 Foreign Labor effect on Economic Growth

The effect of foreign labor on economy growth can be determined by two scopes whereas first is on their economy level and the next is on the economy level on the migrated country. The international migration of labor is an important component of globalization and economic development in many less developed countries (LDCs). The number of international migrants, or people residing in a country other than their country of birth, has increased more or less linearly over the past 40 years, from an estimated 76 million in 1965 to 188 million in 2005, J. Edward Taylor (2006).

International migration raises both hopes and concerns for the LDCs from which international migrants come. The migrants include millions of highly educated people from countries in which human capital is relatively scarce, Ozden and Schiff(2005), but also significant flows of relatively low skilled workers whose productivity and wages are far higher abroad than at home. International migration also produces benefits. The most tangible of these are remittances, the income that migrants send home.

Besides that, there is little information on where, within countries, the international migration originates and remittances flow. Data from the few national income and expenditure surveys and various regional surveys that gather this information reveal that both migration and remittances are concentrated within, as well as among, countries. This means that international migration affects some countries, and within these countries, some regions, more than others.

Thus, migration has a positive or negative effect on development. Negative effects of international migration on developing countries have received considerable attention in both academic research and the press. These include the cost to LDCs of losing labor and human capital to foreign labor markets, especially the "brain drain." Less attention has been given to the positive effects of international migration. Increasingly the conclusion of academic research is that, although the negative effects of international migration cannot be ignored, they need to be balanced with the positive effects. These include remittance income and the economic multipliers that it produces, the influences of migration and remittances on investments, which appear to increase productivity in agricultural and nonagricultural activities; poverty alleviation; and migration-induced incentives to invest in schooling and health.

There is little doubt that the loss of human resources to international migration can have negative effects on economic development in migrant sending areas. If, as is likely to be the case, international migrants come from relatively labor-abundant areas, then sacrificing these individuals to foreign labor markets may not have a very large impact on production at the origin, as eloquently explained by Nobel laureate W. Arthur Lewis (1954).

By the way, the discussion of international migration puzzles and paradoxes leads us to the following conclusions, which set the stage for thinking about migration and development policy options. First it concludes that underdevelopment drives migration, but migration also affects underdevelopment. Next, income gaps between rich and poor countries create incentives for international migration, but they are a necessary not a sufficient condition. Most people do not migrate, even when incomes are far higher abroad than at home. Income growth in migrant sending areas often is associated with more international migration, not less. In all countries that experience rapid income growth, the share of people in farm jobs and in rural areas goes down. Then, international migration can have many complex effects on migrant sending households and also on the rest of the economy in migrant sending areas. Surveys of how households spend their remittances shows are very little result.

Besides that, international migration is driven by networks, whether through contacts with others who have migrated or through recruitment. Once international migration from a particular region reaches a certain point, it tends to take on a life of its own. Half of the world's international migrants are women, whose motives for migrating, constraints, concerns and impacts on sending areas often are different than those of males.

Lastly, the research on Lebanese country conclude that the impact of foreign labor on the economy can not be assessed properly in the absence of broad ranging studies due to the complex and controversial nature of the relation involved. Such studies, however, can not be carried out at present because of the lack of relevant surveys and facts. It is important to bear in mind in this connection that remittances constitute a considerable drain of foreign exchange resources. However, the bulk of remittances represent payments for services needed by the Lebanese economy. In other words, they help to generate value added that would not be forthcoming without foreign labor. The presence of foreign labor also helps to avoid bottlenecks and meet seasonal needs; and in the present circumstances, provides manpower needed to implement the reconstruction and rehabilitation program. Considerable profits accrue to companies, employers, employment agencies and brokers, as a result of employing foreign labor.

This, however, does not translate into tangible economic and social benefits for the Lebanese citizen, since the employment of cheap foreign labor is not reflected in lower prices for commodities and services that foreigners help to produce. Finally, foreign labor should be provided with a minimum of social services.

### 2.3 Foreign Labor effect on Unemployment Rate

Current issue in Taiwan discover that the impact of foreign workers on the rising unemployment. The results show that the introduction of foreign workers plays a complementary role and reduces unemployment rate at the early stage, defined as the first period after the shock. However, over time, the importation of foreign workers robs jobs from local unskilled labor and lifts the unemployment rate. In contrast to existing literature, supports the view that immigration increases the unemployment rate for nationals in the long run. In line with the recent world recession, Taiwan's unemployment rate jumped from 2.99% in year 2000 to 4.57% in 2001. In comparison with other countries, this figure may not be compelling. However, compared to its own historical record, during the past four decades, Taiwan's unemployment rates were stable staying below 3% and for most years, below 2%.

A direct target of blame for job losses is the importation of foreign workers. Taiwan legalized the importation of foreign workers in October 1989. The two main reasons for the Taiwanese government taking this step were, first, there was a shortage of native unskilled labor. This situation impeded the continuation of the national Fourteen Major Construction Projects and the Six-year National Development Plan. Second, the unskilled wage had increased high enough to drive firms to look for cheaper workers overseas. This accelerated Taiwan's outward foreign direct investment and drained capital out of the country. The importation of foreign workers was aimed at resolving these problems, impelling the Taiwanese economy to move forward.

One decade has elapsed since the first entry of foreign workers and a range of problems related to foreign workers, not only economy but also social, have emerged and have become very important public policy issues in Taiwan. In particular, during this time of a high unemployment rate, a popular perception is that foreign workers rob jobs from native workers.

The impression of foreign workers being job robbers is also popular in other countries, especially those countries accommodating a significant number of immigrants. A large body of literature investigating the effect of immigration on native workers has been undertaken by

U.S., Canada and Australian studies. Most of the findings suggest that immigration is not a cause of unemployment, or even that it reduces the rate of unemployment ;Withers & Pope (1993), Tian & Shan (1999), Lalonde & Topel (1991), Altonji & Card (1991), Borjas (1994), Friedberg & Hunt (1995). However, Lee (1992) finds evidence of immigration contributing to the high unemployment rate in Canada. All existing research in this area is based on empirical studies in which the analysis is conducted by using cross section or time series data.

Finally, the change of pattern by reducing the number of imported foreign workers in 2001 alleviates the annual growth rate of unemployment. This is consistent with that over time foreign workers has become a substitute to natives, a reduction of them has a positive effect on moderating the growing unemployment rate.

### 2.4 Security Implication towards Foreign Labors

Recent disputes over the negative impact of foreign workers on unemployment have lead the Taiwanese Government to reduce the number of foreign workers in 2001. Meanwhile, local employers argue that foreign are engaged in jobs in which natives show little interest, therefore, they demand more cheap foreign workers. Hence to avoid the entries of foreign workers they suggests that, at the current time with a high unemployment rate, the Council of Labor Affairs should consider imposing a non- increasing number of foreign workers' policy to prevent a further escalation of, the unemployment rate. A policy of decreasing by 5% the number of imported foreign workers also increases the unemployment rate in the short run and stays the reached level afterwards. Not only that, this sheds light on an appropriate policy on foreign workers for a small open economy like Taiwan needs to consider the state of the global economy. During a recession, in order to avoid a second wave of job losses from shutting down firms by keeping production costs low, importing a stable non decreased number of foreign workers may be an alternative in the issue of unemployment.

Nevertheless, the result suggests that an appropriate policy on foreign workers for a small open economy like Taiwan needs to consider the economic tendency of the world. By considering the current ambiguity of world economic recovery and the high unemployment rate, a cautious policy for the Council of Labor Affairs to adopt is to keep the current imported level of foreign workers.

Besides that in Lebanese they need to adopt policies to regulate the inflow of foreign labor into their country, taking into consideration the actual needs of the economy with a view to providing more job opportunities for Lebanese citizens. Many of the foreign workers entering the country have to wait a long time before finding a job, which could push them to commit criminal acts. Those monitoring security reports observe a high rate of crime committed against foreigners, by foreigners against Lebanese, and among foreigners themselves. Hence there must be strict enforcement by government to protect the peace of Lebanese.

Unfortunately there is also the bad treatment and excesses that affect mainly foreigners performing household services (withholding passports and salaries, and depriving them of other entitlements such as time off and holidays). This highlights the need for change to ensure basic rights for foreign workers. Hence, government supposes implement right regulation to reduce the numbers of foreign labors and at the same time they need to protect the rights of foreign labors as well.

22

### 2.5 Conclusion

The results of previous literature review, it has been found that there are impact of foreign labors entries on economic growth, unemployment rate and how does government intervention will help to overcome the social problem that lead by foreign workers. Thus from the article review it's proven that as foreign labors increases the economic growth will increases too. Secondly, from the previous data on the other article it shown that the entries of foreign labors will lead to increase the unemployment rate in long term which will negatively effect on economy growth. Lastly, there are a lot of critical social issue which done by the most of illegal foreign workers who use fake document to enter ones country. Hence, there are so many policies that taken by each government from different countries to prevent the entries of foreign workers especially the illegal foreign migrant. This study contributes to the literature by providing evidence on the positive and negative impact of the foreign labors in Malaysia.

### **CHAPTER 3**

### METHODOLOGY AND DATA

This chapter will focus on model specification based on the theoretical arguments in the literature. The study will utilize data from Department of Economic Planning Unit, Royal Police Department and World Bank data which is specifically on foreign labor entries in Malaysia, economic growth rate, unemployment rate and the number of crime for 30 years and the analysis will use time series techniques to examining the relationship between foreign labor towards economic growth and unemployment rate. Thus, by this search will able to identify the relationship between the foreign labors and crime that happens in Malaysia. In this chapter there will be discussion on empirical specification, measurement on variables, techniques and procedure about the econometric analysis. A brief description of data employed in the study is given at the end of the chapter.

### **3.1** Specification of the Model

Under this section an empirical model that will be estimated will be discussed. Hence, discussion is focused on the specification of the model and divided the data for Gross Domestic Product, Unemployment Rate and variables. Nevertheless, logistic regression analysis is one of the most frequently used statistical procedures, and is especially common in medical research (King and Ryan 2002). The technique is becoming more popular in social science research. Ordinary least squares (OLS) regression, in its various forms (correlation, multiple regression, ANOVA), is the most common linear model analysis in the social sciences. OLS models are a standard topic in a one-year social science statistics course and are better known among a wider audience. If a dependent variable is a binary outcome, an analyst can choose among discriminate analysis and OLS, logistic or probity regression. This paper employed the ordinary least square test methodology to examining the direction of the relationship between foreign labors with GDP, unemployment rate and crime in Malaysia. To verify the variables, Augemented Dickey Fuller (ADF) Unit Root Test based on well-known Dicker- Fuller producer is used. The Granger Causality tests are employed to test the correlation and possible relationship among the variables and the economic growth. This econometric test is forgoing with correlation test on the variable employed in the study.

A Simple Functional Model is presented thus:

$$Y = f(fl, uem, crm) \tag{3.1}$$

$$UEM = f(fl, y) \tag{3.2}$$

From above equation (3.1), it shows that Y represent the Malaysia Gross Domestic Product (GDP). Meanwhile the first variable of this variable fl represent as foreign worker or foreign labor. Second variable uem represent of unemployment rate in Malaysia. Lastly, the third variable is crm which represent crime. The crm variable acts as proxy due the data are on total crime happen in Malaysia, it is not specifically done by foreign labors. The independent variables of this equation are foreign labors, unemployment rate and crime (fl, uem, crm) and the dependent variable is Malaysia Gross Domestic Product (Y). This equation is mainly to examine the relation between foreign labor and economy growth. Hypothesis can be made from equation (3.1), whereas:

H0 = Foreign labors (fl) does impact on Malaysia Gross Domestic Product (Y).

H1 = Foreign labors (fl) does not impact on Malaysia Gross Domestic Product (Y).

Besides that, in equation (3.2), UEM represent as unemployment rate which it also plays a role as dependent variable. Moreover, the independent variables are fl as foreign labors and y representing Economic Growth in Malaysia [Malaysia Gross Domestic Product (GDP)]. Equation (3.2) is to discover the impact of foreign labor to unemployment rate in Malaysia. This is short equation with only two variables; hence the simple Granger Causality tests will be use. Hypothesis can be made from equation (3.2), whereas:

H0 = Foreign labors (fl) does impact on Unemployment Rate in Malaysia (UEM).

H1 = Foreign labors (fl) does not impact on Unemployment Rate in Malaysia (UEM).

Both of this equation states merely that at any moment, the entries of foreign labor have an impact on unemployment and economy growth. The economy growth showing the positive relation with the foreign labor which means it has a positive impact on economy. Meanwhile, the unemployment rate also showing the positive relation with the foreign labor but it significantly has a negative impact towards growth on nation. There are two reasons for the positive relation between crime and foreign labor. Firstly, as number of foreign labor increases then the number
of crime will increase too. Secondly, is that when the number of foreign labor increases then the unemployment rate of local citizen will increase too, hence this will lead them to involve in crime to support their life expenses.

## 3.2 Empirical Model

In this section, a simple model is set out to provide an organizing framework to examine the ways in which entries of foreign labors will effect on economy growth and unemployment rate. The test is carry out by using OLS. OLS can also be model binary variables using linear probability models (Menard 1995, p 6). OLS may give predicted values beyond the range (0,1), but the analysis may still be useful for classification and hypothesis testing. The discussion is focused on the expansion explanatory variable in the equation (3.1) and (3.2). The proposed empirical Model by equation (3.3) and (3.4) is as follow for the effect of components of variables selected on economic growth.

In an econometric format:

$$\ln Y_{it} = \beta_0 + \beta_1 \ln f l_{it} + \beta_2 \ln u e m_{it} + \beta_3 \ln c r m_{it} + \varepsilon t_{it} \qquad (3.3)$$

$$ln UEM_{it} = \beta_0 + \beta_1 ln f l_{it} + \beta_2 ln y_{it} + \varepsilon t_{it}$$
(3.4)

Equation (3.3) shows the economy growth thru the GDP where  $Y_{it}$  is a GDP,  $fl_{it}$  representing the foreign labor,  $uem_{it}$  represent the unemployment rate and  $crm_{it}$  representing the crime which is a proxy due it is total crime. Besides that,  $\epsilon t_{it}$  represent as an error term. Meanwhile, due all the data are mixed in percentage, unit and currency (MYR), then the log plays role in interpreting the significant level of the result, (Stephen Morris, 2009). Log actually is method in analyzing the relation between various measurements of data. The constant is denote for  $\beta_0$  while  $\beta_1 - \beta_0$  are the coefficient show how much a unit of increase in the each variable will affect the economy growth.

# **3.3** Description of the Key Variable

In this part, the discussion will be detail description of the variable in the econometric model at (3.3) and (3.4). The effect of foreign labors in Malaysia can be divided into two aspects. First is on the economy growth which the variables are foreign labor, unemployment and crime. Secondly s on unemployment rate whereas the variables are foreign labors and economy growth. Both of this equation can be dividing into three main categories which are economy growth, foreign labor, unemployment rate and total crime.

#### 3.3.1 Foreign Labor

Foreign labors are those who work in a foreign country without initially intending to settle there and without the benefits of <u>citizenship</u> in the host country. Some are recruited to supplement the workforce of a host country for a limited term or to provide skills on a contractual basis that the host country seeks. Others are recruited directly by a private employer, which may need to certify that it cannot find workers among the local citizens. Host countries may also import foreign workers for jobs when their citizens refuse to do. The test taking into

account of foreign workers as an indicator to test the impact on economic growth and unemployment rate of nation, Vijayakumari Kanaathy (2004). Migration of labor has both positive correlations on both variables. Besides that, foreign labor will be tested with crime cases, to check is there having positive relation.

### 3.3.2 Gross Domestic Product (GDP)

GDP may therefore be viewed as rough indicator of a nation's property. Nevertheless, GDP are commonly used to examining the economic performance and the relationship between other variables. In other hand, GDP are used to measure the nation's economy growth which means the positive impact are seen if the GDP have positive correlation with the variable tested.

#### **3.3.3 Unemployment Rate**

In classical economic theory, unemployment is seen as a sign that smooth labor market functioning is being obstructed in some way, Thomas Weisskopf (2006). Besides that, Milton Friedman's (1968), laid out a view of unemployment and stabilization policy that retains a firm grip today on the profession and policymakers. Friedman saw the unemployment rate as a stable natural rate plus a component that responded to macroeconomic determinants, including monetary policy. Thus, the unemployment rate variable are tested to investigate is there having positive relation due to the entries of foreign workers entries. However, Lee (1992) finds evidence of immigration contributing to the high unemployment rate in Canada. All existing research in this area is based on empirical studies in which the analysis is conducted by using cross section or time series data.

#### 3.3.4 Crime

Crime is the breach of rules or laws for which some governing authority (via mechanisms such as legal systems) can ultimately prescribe a conviction. Individual human societies may each define crime and crimes differently. The sociologist Richard Quinney famous for theory of Social Reality has written about the relationship between society and crime. When Quinney states "crime is a social phenomenon" he envisages both how individuals conceive crime and how populations perceive it, based on societal norms. There is a sense in Malaysia that the rising level of crime is committed by foreigners, and in particular, migrant workers. This feeling seems to be borne out in the statistics. The New Straits Times estimated that four out of 10 prison inmates in Malaysia are foreigners. Hence, the test is to examine a positive relation between the foreign labors and crime. Perhaps, this will be a guideline to government in protecting the migration of foreign labors.

### **3.4** Estimation procedure

The objective of this section is to explain the relevant econometric procedures in testing panel data. The most appropriate estimation procedure will be discussed under various conditions so as to allow us to achieve the specific objective.

#### 3.4.1 Unit Root Tests

The unit root test is meant to know the stationary of the variables. We applied Dicker Fuller (DF)/Augmented Dicky Fuller (ADF) test (Dickey and Fuller, 1979; 1981; dickey et al., 2006; 1986; Enders, 1995) to investigate the same. The procedure of this test is as follow: Regress equation (1) and obtain the  $\tau$ -statistics for  $\rho = 1$  by Ordinary Least Squares (OLS) method:

$$Y_t = \rho Y_{t-1} + U_t, and - 1 \le \rho \le 1$$
(3.5)

Where  $Y_t$  is a variable of the interest and  $U_t$  is white noise error term, which follows zero mean with a unit variance. The test follows the calculation of  $\tau$ -statistics (Tau- statistics), which is tested in Mackinnon 1991 under the null hypothesis: $H_o$ :  $\rho = 1$  against an alternative hypothesis  $:H_A: \rho \neq 1$ . If  $\rho = 1$ , there exists unit root or non-stationary. If the variable is differenced once and the differenced series is stationary, then it is integrated of order one [I (1)]. Similarly, if it is differenced twice and the differenced series is stationary, then it is integrated of order two [I (2)] and so on. However if  $U_t$  violates the above assumption then equation (3.5) is to be modified with p-lagged changes in the dependent variable as an additional regression, which is as follows:

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \sum_{i=1}^p \alpha_i \, \Delta Y_{t-i} + \varepsilon_t \tag{3.6}$$

Where  $\Delta$  is the difference operator, t is time trend,  $\varepsilon$  is white noise error term and  $\beta_1, \beta_2, \delta, \alpha_1, \dots, \alpha_p$  are parameters, which to be estimated. It follow the suggestion of Engle Yaoo(1987) to use Akaike Information Criterion (AIC) for determining the optimal specification of equation (3.4). The appropriate order of the model is determined by computing the above

equation over a selected grid of values of the number of lag k and finding that value of p at which the AIC attains its minimum. The distribution of the ADF statistic is non-standard and critical values tabulated by McKinnon (1991) are used.

## **3.4.2** Cointegration test

The central concept of co integration test is the specification of models, which includes the long run movements of one variable relative to others. In other words, it clarifies the existence of long run equilibrium relationship between the other variables. If the time series variables are non- stationary in their level, they can be integrated with integration of order one, when their first differences are stationary. These variables can be co integrated as well, if there are one or more linear combinations among the variables that are stationary. If these variables are being co integrated then there is a constant long run linear relationship among them.

The co integration test was first introduced by Engel and Granger (1987) and then developed and modified by Stock and Watson (1988), Johansen (1988) and Johansen and Juselius (1990). The test is very useful in examining the long run equilibrium relationships between the variables. In present context, we used Johansen maximum likelihood (ML) approach to test the co integration. This is because the technique is currently most reliable one and is better for small sample properties. Another advantage of this method is that several co integration relationships can be estimated simultaneously.

The method usually uses two statistics for testing the co integration: The trace  $(T_r)$  test and the maximum eigenvalue  $(\lambda_{max})$  test. The estimation procedures of these statistics are as follows:

Let :

$$\Delta X_{t} = A_{0} + \prod X_{t-p} + \sum_{i=1}^{p-1} A_{i} \Delta X_{t-1} + \varepsilon_{t}$$
(3.7)

In the above equation, the vector  $\Delta X_t$  and  $\Delta X_{t-1}$  are I(1) variables. Hence, the long run equilibrium relationship among  $X_t$  is determined by the rank of  $\pi$ , say r, is zero, then equation (3.7) reduces to a VAR model of pth order and the variables in level do not have any cointerating relationship. Instead, if 0 < r < n then there are n X r matrices of  $\alpha$  and  $\beta$  such that

$$\prod = \alpha \beta' \tag{3.8}$$

Where, the strength of cointegation relationship is measured by  $\alpha$ ,  $\beta$  is cointegrating vector and  $\beta' X_t$  is I(0), although  $X_t$  are I(I). in this framework, we have to estimate  $(A_0, A_1 \dots A_{p-1}, \pi)$  thourgh maximum likelihood procedures, such that ' $\pi$ ' can be written as in (3.7). To estimate all these parameter, we have to follow two step procedures. In the first step, regress  $X_{t-1}$  on  $\Delta X_{t-1}$ ,  $\Delta X_{t-2} \dots \Delta X_{t-p+1}$  and obtain the residuals  $\hat{u}_t$ . In the second step, regress  $X_{t-1}$  on  $\Delta X_{t-1}$ ,  $\Delta X_{t-2} \dots \Delta X_{t-p+1}$  and obtain the residuals  $\hat{e}_t$ . From the obtained residuals ' $\hat{u}_t$ ' and ' $\hat{e}_t$ ', find the variance-covariance matrices

$$\sum_{uu}^{'} = \left(\frac{1}{T}\right) \sum_{t=1}^{T} \widehat{u_t} \, \widehat{u_t}'$$
(3.9)

$$\sum_{ee}^{'} = \left(\frac{1}{T}\right) \sum_{t=1}^{T} \widehat{e_t} \, \widehat{e_t}^{'} \tag{3.10}$$

$$\sum_{ue}^{'} = \left(\frac{1}{T}\right) \sum_{t=1}^{T} \widehat{u_t} \, \widehat{e_t}' \tag{3.11}$$

The maximum likelihood estimator of ' $\beta$ ' can be obtained by solving:

$$\left|\lambda \sum_{ee}^{\wedge} - \sum_{eu}^{\wedge} INV(\sum_{uu}^{\wedge}) (\sum_{ue}^{\wedge})\right| = 0$$
(3.12)

With the eigenvalue  $\hat{\lambda}_1 > \hat{\lambda}_2 > \cdots \dots \dots \hat{\lambda}_n$ . The normalized cointegrating vectors are  $\hat{\beta} = (\hat{\beta}_1, \hat{\beta}_2, \dots, \hat{\beta}_n)$ , such that  $\hat{\beta}' \sum_{ee}^{\hat{\beta}} \hat{\beta} = I$ .

Now we can test the null hypothesis that  $r=h, 0 \le h < n$  against the alternative hypothesis of r = n by obtaining the following statistics:

$$\lambda_{trac} = L_A - L_0$$

Where:

$$L_0 = -\left(\frac{Tn}{2}\right)\log(2\pi) - \left|\frac{T}{2}\right| Log\left(\sum_{uu}^{\hat{}} - \left(\frac{T}{2}\right)\sum_{i=1}^{h} Log(1-\widehat{\lambda_i})\right)$$
(3.13)

$$L_A = -\left(\frac{Tn}{2}\right)\log(2\pi) - \left|\frac{T}{2}\right|Log\left(\sum_{uu}^{\wedge} - \left(\frac{T}{2}\right)\sum_{i=1}^{h}Log(1-\widehat{\lambda_i})\right)$$
(3.14)

Hence,

$$L_A - L_0 = -\left(\frac{T}{2}\right) \sum_{i=h+1}^n Log(1 - \widehat{\lambda_i})$$
(3.15)

$$2(L_A - L_0 = -T \sum_{i=r+1}^n Log(1 - \hat{\lambda_i})$$
(3.16)

Where  $\hat{\lambda}_{r+1}, \dots, \hat{\lambda}_p$  are the estimated p-r smallest eigenvalues. The null hypothesis to be tested is that there are at most r cointegrating vectors. That is the number of vectors is less than or equal to r, where r is 0, 1, or 2 .....and so forth. In the each case, the null hypothesis is tested against the general alternative. Alternative the  $\lambda_{max}$  statistics is:

$$\lambda_{max} = -TLog\left(1 - \hat{\lambda}_{r+1}\right) \tag{3.17}$$

In this test, the null hypothesis of r co integrating vectors is tested against the alternative hypothesis of r=1 co integrating vectors. Hence the null hypothesis r=0 is tested against the alternative r=1, r=1 against the alternative r=2 and so forth. It is well known that the co integration test very to the choice of lag length. The Akaike Information Criterion (AIC) and Scfwarz Bayesian Criterion (SBC) are used to select the number of lags required in the co integration test.

If there are exist of co integration vector between that variable, there is possibility of causality between the two at least in one direction (see Granger, 1988). Thus, Granger causality test can be used to examine the nature of the relationship (see Granger; 1986; Engle and Granger, 1987)

#### **3.4.3** Granger Causality Test

The notion of Granger causality is based on a criterion of incremental forecasting value. A variable X is said to "Garnger cause" another variable Y, if "Y can be better predicted from the past of Y alone, other relevant information being used in the prediction" (Pierce,1977). Meanwhile, Sims (1972) has shown that a necessary condition for variable X to be exogenous to another variable Y is that Y fails to Granger cause X. In other words, by testing for Granger causality, it is possible to refute claims of econometric erogeneity. Therefore test for Granger causality are valuable tools in the empirical analysis. Indeed, in economics, tests for Granger causality are becoming recognized as essential step in model building (Sargent, 1979).

Granger (1969) proposed a time-series data based approach in order to determine causality. In the Granger-sense x is a cause of y if it is useful in forecasting y. In this framework "useful" means that x is able to increase the accuracy of the prediction of y with respect to a forecast, considering only past values of y.

There are three different types of situation in which a Granger-causality test can be applied:

• In a simple Granger-causality test there are two variables and their lags.

• In a multivariate Granger-causality test more than two variables are included, because it is supposed that more than one variable can influence the results.

• Finally Granger-causality can also be tested in a VAR framework; in this case the multivariate model is extended in order to test for the simultaneity of all included variables.

The empirical result in the chapter is analyzed by using a multivariate Granger Causality test in order to examining the relation between the variables in this study.

## 3.5 Data

The data for this study have been drawn from four main sources: the Economy Planning Unit, Royal Malaysia Police, World Bank Data and Department of Statistics. The study covers 30 years from 1981 to 2010. There was no problem with the data collection process as regards the GDP time series where different sources are available to provide the required data for the whole study. Besides that, there was a difficulty in getting all the data for crime in Malaysia from Royal Malaysia Police for 30 years period. Hence a projection has done to get the extra data for it. Regarding the variable of foreign labor it is obtain for only 30 years. Thus, the test will be carrying out for 30 years.

## 3.6 Conclusion

The test is to examine the impact of foreign labors to the economic growth and unemployment rate. Crime is a variable to investigate the negative effect of foreign countries. The test will help to discover which of the two variables (economy growth and unemployment rate) has more impact due to the foreign labor entries. As the result from theoretical, the conclusion is that the economy growth and unemployment rate have positive relationship with foreign labors. Indeed, the foreign workers give a positive impact to economy but negative impact on unemployment rate. The test will give clear result in showing which from these two variables effected more significantly.

#### **CHAPTER 4**

# **RESULTS AND DISCUSSION**

This chapter discusses the major findings for all various regression model used in this study. This chapter begins with a discussion on what the results of this information seeking context measurement were. Three objective of the study are then presented along with the major findings that addressed the question. Possible explanations for the findings are discussed in each section, along with their implication. This chapter concludes with a discussion of the real impact of foreign labor to economic growth and unemployment rate in Malaysia as compare to the theoretical model proposed in Chapter 3.

Section 4.1 explains some preliminary analysis on the panel unit root test that is analysis on the order of integration of each series. Section 4.2, time series cointegration test will be carried out accordingly to find out the long run relationship among the set of nonstationary variables provided that all series are integrated at first difference. Next, in the section 4.3 will illustrate on Granger causality test. This test is good in forecasting the correlation between the entire variable in the future. Section 4.4 will illustrate our main focal point namely the long run equation. For this purpose the Ordinary Least Square (OLS) for the time series data technique is applied to estimate the unknown parameters in a linear regression model. This method minimizes the sum of squared vertical distances between the observed responses in the dataset, and the responses predicted by the linear approximation. The resulting estimator can be expressed by a simple formula, especially in the case of a single regressor on the right-hand side. Finally, in section 4.5 will conclude all the findings form the test and it will answer the entire research question for this paper.

### 4.1 Preliminary Analysis

In this sub section, there two main issues will be determined, namely the existence of unit root problem and the inclusion of constant plus time trend in the empirical equation for time series data.

## 4.1.1 Panel Unit Root Test

As with standard cointegration tests is important to know the stationary properties of the data to unsure that incorrect inferences are not made. Testing for stationary in panel data differs somewhat from conducting unit root tests in standard individual time series; these differences will discussed as follows.

Conventional unit root test like the ADF test have been found to have low testing powers (Coakley *et a*l., 1996; Coakley and Kulasi, 1997; Oh *et al.*, 1999). The failure to reject the null of unit root in the data by the conventional ADF unit root test may be due to low testing power of the test. In statistics, a unit root test tests whether a time series variable is nonstationary using an autoregressive model. A well-known test that is valid in large samples is the augmented Dickey–Fuller test. The optimal finite sample tests for a unit root in autoregressive models were developed by John Denis Sargan and Alok Bhargava. Another test is the Phillips–Perron test. These tests use the existence of a unit root as the null hypothesis, Dickey, D.A. and W.A. Fuller (1979). Higher number of observation will lead to higher power of test.

39

Table 4.1 a, presents the results of the Dickey Fuller unit root tests at level indicating that all variables are I(0) in constant and constant plus time trend of the time series rot regression. These results clearly show that the null hypothesis of a time series unit root in the level of series cannot be rejected at various lag length. For the full explanation at level are ln fl [constant: (0.4346); constant plus trend: (0.1514)], ln GDP [constant: (0.9885); constant plus trend: (0.5627)], ln uem [constant: (0.6126); constant plus trend: (0.6791)], ln crm [constant: (0.9980); constant plus trend: (0.9997). finally, the result indicates that foreign labors in Malaysia for the 30 years are no correlation to unemployment rate, economic growth and numbers of crime in Malaysia and therefore are fail to reject the null hypothesis of a unit root. The results of the time series unit root tests confirm that the variables are non stationary at level.

		Level	
Variable			
	Constant	Constant + Trend	
	-1.65733	-3.03054	
ln fl	(0.4346)	(0.1514)	
	-1.79242	-2.01415	
ln GDP	(0.3703)	(0.5505)	
	-2.49601	-2.44475	
ln uem	(0.1275)	(0.3504)	
	1.01764	-2.93288	
ln crm	(0.9922)	(0.1806)	

#### Table 4.1a: Unit Root Tests: Level

Notes: () Is Probability Value. The lag length is chosen on the basis of the Akaike's Information Criteria (AIC) where the specify maximum lag order (k) in autoregression and next select appropriate lag order according to the AIC. The values are distributed N(0,1) under null of unit root or no cointegration.

Table 4.1b presents the results of the tests at first difference for ADF unit root tests at first difference which is indicating that all variables are I(1) in constant and constant plus time

trend of the unit root regressions. Hence, the results support the presence of a unit root at the level of all variables and the absence of any unit root after first differencing: in other words, all variables are I(1). This result clearly shows that the null hypothesis of a time series unit root in the level of the series will rejected at various lag lengths. For more explanation at first difference, ln fl [constant: (0.0004); Constant plus trend: (0.0026)], ln gdp [constant: (0.0238); constant plus trend (0.0688)], ln uem [constant: (0.0129); Constant plus trend: (0.0530)], ln crm [constant: (0.0001); Constant plus trend: (0.0004)]. Finally, we can conclude that variables of unemployment, crime, economic growth are correlated to foreign labor in Malaysia and therefore it is acceptable to reject the null hypothesis of the unit root test. The results of the ADF unit root tests confirm that the ADF unit root tests confirm that the variables are stationary at first difference.

		Level	
Variable			
	Constant	Constant + Trend	
	-5.52929	-5.37616	
ln fl	(0.0004)	(0.0026)	
	-3.44448	-3.52395	
ln GDP	(0.0238)	(0.0688)	
	-3.58246	-3.55219	
ln uem	(0.0129)	(0.0530)	
	-6.36967	-6.47512	
ln crm	(0.0001)	(0.0004)	

**Table 4.1b: Unit Root Tests: First Difference** 

Notes: () Is Probability Value. The lag length is chosen on the basis of the Akaike's Information Criteria (AIC) where the specify maximum lag order (k) in autoregression and next select appropriate lag order according to the AIC. The values are distributed N(0,1) under null of unit root or no cointegration.

# 4.2 Cointegration Test

The non-stationary of the variables as shown by the unit root tests raises the problem of spurious regressions. The spurious regression problem can be addressed by employing cointegration methodology. However before the co-integration regression model can be estimated, it has to be first ascertained if the non-stationary variables are cointegrated with one another. The cointegration analysis is able to identify whether there exists a non spurious equilibrium relationship between then variables. The trace test and eigenvalue test determine the number of cointegrating vectors. This implies stationary long-run equilibrium relationships between the variables. The maximum lag length of the VAR model which is used in Johansen Procedure is determined by the Likelihood Ratio (LR) statistics. The maximum lag length is six for all variables used in this test.

#### **4.2.1** Johansen Cointegration test

The next step is to test whether the variables are cointegrated using Johansen Cointegration test methodology as described previously for the Model of equation (3.1) and (3.2). This is to investigate whether long-run steady state or cointegration exist among the variables. The results reveal that there is one cointegrating vector in the system.

## Table 4.2 (a) GDP and Unemployment

Trend assumption: Linear deterministic trend Series: GDP UEM Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.630073	16.49609	15.49471	0.0352
At most 1	0.035895	0.584888	3.841466	0.4444

The above table shows the results of the Johansen cointegration test between economic growth and the unemployment at the 5% significance level. This is clearly showing that there is a negative relationship between economic growth and unemployment. A reduction in unemployment rate will increase the economic growth in Malaysia. Hence, we should reject the null hypothesis of no cointegration among the variables.

#### Table 4.2 (b) GDP and Foreign Labor

Trend assumption: Linear deterministic trend Series: GDP FL Lags interval (in first differences): 1 to 4

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.601942	16.80380	15.49471	0.0316
At most 1 *	0.243546	3.907588	3.841466	0.0481

Unrestricted Cointegration Rank Test (Trace)

The above table shows the results of the Johansen cointegration test between economic growth and the foreign labor at the 5% significance level. This is clearly showing that there is a positive relationship between economic growth and foreign labors. Both of these variables are correlated each other. As numbers of foreign labors increases, then the level of economic growth increases too, its wok in vice versa. Hence, we should reject the null hypothesis of no cointegration among the variables.

# Table 4.2 (c) GDP and Crime

Trend assumption: Linear deterministic trend Series: GDP CRM Lags interval (in first differences): 1 to 3

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.494463	15.73178	15.49471	0.0461
At most 1 *	0.306949	5.499774	3.841466	0.0190

The above table shows the results of the Johansen cointegration test between economic growth and the number of crimes of foreign labor which this is proxy variable at the at a 5% significance level. This is clearly showing that there is a positive relationship between economic growth and crime foreign labors. Both of these variables are correlated each other. As numbers of crime by foreign labors increases, then the level of economic growth increases too, its wok in vice versa. Hence, we should reject the null hypothesis of no cointegration among the variables.

#### Table 4.2 (d) Unemployment and Foreign Labor

Trend assumption: Linear deterministic trend Series: UEM FL Lags interval (in first differences): 1 to 4

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.484351	17.42593	15.49471	0.0253
At most 1 *	0.393105	7.490986	3.841466	0.0062

Unrestricted Cointegration Rank Test (Trace)

The above table shows the results of the Johansen cointegration test between unemployment rate and foreign labors at the 5% significance level. This is clearly showing that there is a positive relationship between unemployment rate and foreign labors. Both of these variables are correlated each other. As numbers of foreign labors increases, then the level of unemployment rate increases too, its wok in vice versa. Hence, we should reject the null hypothesis of no cointegration among the variables.

# 4.3 Granger Causality Test

The concept of Granger causality, by which we actually understand *precedence*, is based on the idea that a cause cannot come after its effect. More precisely, variable X is said to Granger-cause another variable, Y, if the current value of Y(yt) is conditional on the past values of X (xt-1, xt-2, ..., x0) and thus the history of X is likely to help predict Y. Note, that this is causality for one period ahead. This concept is generalized by Dufour and Renault (1998) to causality h periods ahead, and to causality up to horizon h, where h is a positive integer that can be infinite. They show that in a bivariate system no-causality for one period ahead implies nocausality at, or up to, any horizon.

Null Hypothesis:	Obs	F-Statistic	Probability
UEM does not Granger Cause GDP GDP does not Granger Cause UEM	16	1.51408 2.82311	0.27633 0.09928
Null Hypothesis:	Obs	F-Statistic	Probability
FL does not Granger Cause GDP GDP does not Granger Cause FL	17	0.18450 5.06273	0.83383 0.02545
Null Hypothesis:	Obs	F-Statistic	Probability
CRM does not Granger Cause GDP GDP does not Granger Cause CRM	15	13.2117 0.25435	0.00392 0.89694
Null Hypothesis:	Obs	F-Statistic	Probability
FL does not Granger Cause UEM UEM does not Granger Cause FL	19	0.00060 1.09602	0.98071 0.01070

According to the first test among the variable of unemployment rate and economic growth, the hypothesis is that unemployment does not influence the economic growth is rejected due it is not in the significant level where the probability is 0.27633. Thus, it define that the unemployment does influence the economic growth. Meanwhile, the economic growth does not

influence the unemployment is not rejected due the probability is significant at 0.02545. Then, can be conclude that economic growth does not influence the unemployment.

Next, according to the second test among the variable of foreign labor and economic growth, the hypothesis is that foreign labor does not influence the economic growth is rejected due it is not in the significant level where the probability is 0.83383. Thus, it define that the foreign labor does influence the economic growth. Meanwhile, the economic growth does not influence the foreign labor is not rejected due the probability is significant which 0.02545. Then, can be conclude that economic growth does not influence the foreign labor.

Besides that, the third test among the variable of crime and economic growth, the hypothesis is that crime by foreign labors does not influence the economic growth is accepted due it is significant where the probability is 0.00392. Thus, it define that the crime by foreign labor does not influence the economic growth. Meanwhile, the economic growth does not influence the crime by foreign labors is rejected due the probability is not significant which the probability 0.89694. Then, can be conclude that economic growth does influence the crime by foreign labor.

Then, according to the last test among the variable of foreign labor and unemployment rate, the hypothesis is that foreign labor does not influences unemployment is rejected due it is not in the significant level where the probability is 0.98071. Thus, it define that the foreign labor does influences unemployment. Meanwhile, the unemployment does not influence the foreign labor is not rejected due the probability is significant which 0.01070. Then, can be concluding that unemployment does not influence the foreign labor.

# 4.4 Ordinary Least Square

# Table 4.4 (a) Ordinary Least Square Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-76.1431	74646.93	1.358814	0.1943
FL	0.086406	0.220689	0.743399	0.4687
UEM	0.031132	9431.641	-3.301388	0.0048
CRM	0.062600	2.042172	0.794253	0.4394
R-squared	0.866307	Mean depe	endent var	201132.2
Adjusted R-squared	0.611568	S.D. depe	ndent var	79964.14
S.E. of regression	49837.09	Akaike info criterion		24.65557
Sum squared resid	3.73E+10	Schwarz	criterion	24.85440
Log likelihood	-230.2279	-230.2279 F-statistic		10.44673
Durbin-Watson stat	2.231919	Prob(F-s	statistic)	0.000580

Dependent Variable: GDP Included observations: 19 after adjustments

Table 4.4a indicates that there a long-run equilibrium relationship exists in the four variables, namely economy growth (GDP), foreign labor, unemployment, crime by foreign labors in Malaysia. The estimated cointegrating vector has theoretically plausible coefficients. The long run relationship may be written as:

$$\ln \text{GDP}_{it} = -76.1431 + 0.086406 \ln \text{fl}_{it} + 0.03113 \ln \text{uem}_{it} + 0.06260 \ln \text{crm}_{it} + \epsilon t_{it} \quad (1)$$

From equation 1 the result which gain from ordinary least square test, can be conclude that economic growth (GDP) and foreign labor does have positive relationship. The coefficient for the foreign labor from the results is 0.086406 which can be interpret that 1% increase in GDP will lead to an increase by 8.64% for the entries of foreign labor. As the number of foreign labor increases, then these will lead to increase in output of country too due foreign labors playing role as the input to the country's development.

Besides that, the above result shows that there is positive relation between GDP and crime by foreign workers in Malaysia. The coefficient for the crime is 0.06260 which implies that as 1% increase in GDP will lead to an increase by 6.26% on crime issues involve by foreign workers. When the economy level is quite well then this will be a key for foreign labor to get influence in social attack which is crime issue where by this is one of the simplest be to be rich.

Included observations	: 19 after adjus	tments		
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C FL GDP	-51.92595 0.073700 0.031132	1.372455 2.82E-06 4.65E-06	3.783434 1.467211 -3.555132	0.0016 0.1617 0.0026
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood Durbin-Watson stat	0.859873 0.392358 1.225625 24.03449 -29.19282 1.983385	Mean depend S.D. depende Akaike info c Schwarz crite F-statistic Prob(F-statis	ent var riterion erion	4.389474 1.572293 3.388718 3.537840 6.811344 0.007244

Dependent Variable: UEM
Included observations: 19 after adjustments

Table 4.4b indicates that there a long-run equilibrium relationship exists in the three variables, namely economy growth (GDP), foreign labor, unemployment in Malaysia. The estimated cointegrating vector has theoretically plausible coefficients. The long run relationship may be written as:

$$ln UEM_{it} = -51.92595 + 0.073700 ln f l_{it} + 0.031132 ln y_{it} + \varepsilon t_{it}$$
(2)

Thus, from equation 2, shows that there is positive relation between unemployment and foreign labor in Malaysia. The coefficient of foreign labor with respect to the unemployment ad a dependent variable is 0.073700. Unemployment increase by 1% will lead to increase the entries of foreign labor by 7.37%. Hence, it shows that the unemployment rate in Malaysia is heavily affected by foreign labor.

#### 4.5 Summary

This chapter is devoted in analyzing the empirical model as discussed in the Chapter 3 [Equation 3.1 and 3.2 (Model 1)] to find out the possible answers for three objectives of this study. Section 4.1 examines the nature of each variable in unit root test as well as equation. In general, we could say that the integration order of the series are consistently I(1). For this reason, unit root test approach is applicable.

Section 4.2 provides the time series conintegration test based on Johansen and Juselius cointegration. Generally, we found that all the variables are cointegrated in the model. Thereafter, the long run equation is extracted from Pairwise Granger Causality Tests and they are presented in section 4.3.

Thus, by all the results this paper can conclude regarding the objective and the research question as earlier discussed in Chapter 1. The analysis shows that there is impact on unemployment rate due to the entries of foreign labor. Besides that, there is impact on economy growth due rising of foreign labor. Moreover, the crime also shows an impact due to the foreign labors. Investigations through this paper resulted that there are positive and negative effect of the entries of foreign labors to Malaysia but the positive contribution is high compare to the negative effect. Therefore, the growth on GDP is 8.64% significant level contribution from foreign labor. Meanwhile, the increase on unemployment rate is about 7.36% increase in foreign labor. Hence, foreign labors give positive impact towards economy growth but at the same time government should involve in preventing the number of foreign labor to Malaysia because the crime is increases by 6.26% at significant level and same goes to increase in unemployment rate which both of these variables are lost to country. Hence, it is proving that a foreign labor brings more positive effect to Malaysia compare to the negative effect.

### **CHAPTER 5**

### CONCLUSION

This chapter provides a summary, conclusion, Policy Implication, limitation of the study, and suggestion for future study.

#### 5.1 Summary

This study formulated a simple growth model that used time series data techniques to investigate in which the long run relationship between components of Foreign Labor Entry: Effect on Unemployment, Economy Growth and Security Implication in Malaysia. These variables are examined using Johansen Cointegration methods and Ordinary Least Square (OLS) Estimation and Granger Causality.

Here, this study has attempted to investigate the statistical properties of the explanatory variables within a time series ADF test AIC test. The empirical results from the AIC tests clearly indicate all the series in the model are I(1), which means that they are stationary at the first difference, while the results based on the tests for Johansen cointegration provide empirical support that the variables can be considered as a cointegration system.

# 5.2 Conclusion

Several important conclusions can be drawn from this paper. Firstly, our general objective of this study to discover Foreign Labor Entry: Effect on Unemployment, Economy

Growth and Security Implication in Malaysia The analysis shows that there is impact on unemployment rate due to the entries of foreign labor. Besides that, there is impact on economy growth due rising of foreign labor. Moreover, the crime also shows an impact due to the foreign labors. Hence all the econometric data which was discussed significantly prove that there are existences of positive and negative impact of foreign labors on social, politic and by economy it's seems there is positive relation between the foreign worker and unemployment rate in Malaysia. Whereby, as foreign worker increases, the chances for the local citizen to grab job was limited and thus increase the unemployment rate. In addition, economy growth also fall in long run due it was effected by the increases of unemployment rate and increases on the expenses of government to protect and prevent the entries of illegal foreign workers. Thereby, this paper will provide suggestion on security implication to overcome negative issue of foreign labor even there are some positive contribution by foreign labors and all the parties need to cooperate to overcome it especially government.

# 5.3 **Policy Implication**

Foreign workers bring negative impact to Malaysia but at the same time they bring a lot of improvement towards Malaysia's economy growth, this is deniable fact. Therefore, government supposes to do something that the reduction of foreign workers will not affect the country the industrial sector is too dependent on the bulk of labor force should be changed to an automated technology that can handle by the local skilled worker. Besides that, industrial and vocational training institutions should be increased in order to provide a skilled workforce and productive. Malaysia Construction Academy plays an important role to train local workers for the construction sector and should be established for the supply of labor in farming and agriculture sectors.

In addition, the student from institute of higher education, housewives, ex-soldiers, people with disabilities (PWDs) and many retired officers who can be exploited to maximize the country's labor force by working as full or part-time in labor market. Finally, government should not bow to pressure on the issue of salaries and additional labor supply from other countries which involved in exporting foreign worker to Malaysia, instead government should give priority to the interest of local citizen than others.

Furthermore, on July 10, 2009, PEMUDAH formed a task force to handle the issues of foreign workers. This task force gives input to the Cabinet Committee, chaired by the Deputy Prime Minister, Dato' Seri Najib Tun Razak. In 2009, the decisions made at the cabinet committee for foreign workers are to freeze recruitment of foreign worker especially from Bangladesh, release the freeze recruitment of foreign workers in the electrical & electronics and textiles, continue in freezing foreign workers in services sector, except the cook (restaurant), services in the resorts on island. Next, is that all outsourcing company is allowed to supply foreign workers to the manufacturing, farming and agriculture sectors. All foreign workers except domestic worker can be employed for a maximum period of five years. Then, foreign workers are not allowed to work as front line staff and thus all this regulation can reduce population of foreign labor in lobar market in Malaysia which indirectly reduces the negative impact of them on industrial and economic.

Besides that, the policies not only to control the limitation of the foreign workers but also there are some policies which encourage the entries of foreign labor but with a right regulation in importing and exporting the entries of them because they really brings an important sources to our economic growth. Therefore, ASEAN have established some policies affecting the flow of migrants. Economic theory says that growth in trade will create jobs and thus decrease the pressure on people to migrate. This effect, however, is not immediate; in fact, migration may increase temporarily as trade brings labor sending and labor receiving economies closer together. This temporary increase, called a "migration hump," can result when the economies differ greatly in size, when economic restructuring temporarily creates a surplus of workers, and when migration networks are already moving migrants across borders. The possibility of this migration hump may discourage governments trying to reduce the entry of migrant workers from committing to freer trade. But studies suggest that, in the long term, increased trade does reduce migration. Wealthy labor receiving countries that want to discourage immigration can try to build job opportunities in poorer labor sending countries by promoting investment there. In practice, however, investment tends to flow to where profits will be greatest not to where jobs are few and pressures to emigrate are greatest. Malaysia, for example, is a major recipient of investment, even though it sometimes imports foreign workers to staff the factories created with foreign investments. This suggests that investment can at best play a supporting role in reducing emigration pressure, once a country has adopted the policies that create jobs its own citizens can fill, investment can accelerate that growth. Labor receiving countries can take capital that would have been used to create jobs at home and invest it in another country, thereby drawing migrants to its factories but not across its borders.

Many Asian labor importers such as Japan and Korea have been able to keep the share of migrant workers in their labor forces low by investing abroad (and reducing demand at home by automating). One study estimated that the approximately \$50 billion that Japan, Korea, and

Taiwan invested abroad would have created about 500,000 jobs if these nations had built factories at home.

Instead, it created about six million jobs for potential migrants outside the countries. Proposals to establish Japanese retirement communities in other countries (mostly to stretch fixed retirement funds) may have a similar effect in reducing the demand in Japan for immigrant nurses and orderlies. Aid Rich countries also try to reduce migration pressures in poorer countries by offering aid. The International Labor Organization and the UN High Command for Refugees in 1992 asked experts the following question: If donor nations want to use aid to reduce emigration pressures, how should they change their aid policies? The experts agreed that donor countries should provide larger sums of aid tied to economic policy reforms and that there can be no choice between aid and trade, there must be aid and trade. Several concluded that the single most important "aid" that industrial country can provide to labor sending nations is to remain open to their goods, which are often produced in labor intensive or job creating ways.

Migration policy says that the policies of labor receiving countries can have some effect on migration, but most experts agree that labor sending countries hold the key to their futures. They decide which economic policies to pursue and whether to protect or ignore human rights. These and other policies greatly affect emigration pressures. The effects of migration policies are not always so clear. No one really knows which migration policies will work in the short term and which will work over time. This is one reason why the migration policies of countries that are receiving migrants often seem contradictory. Governments want to satisfy labor-short employers and permit foreign workers to enter. But at the same time they want to prevent these workers from settling permanently.

57

Meanwhile, advocates of free migration do not enjoy any of the advantages that supporters of free trade and investment enjoy; no economic theory warns countries that they will grow more slowly if they refuse to let workers cross their borders. There are no institutions equivalents to the World Bank or the International Monetary Fund to encourage countries to be Studies suggest that increased trade does reduce migration.

Moreover, there are some suggestions on policies in taking care of the foreign labors who enter Malaysia. These idea by taking into account the backwardness of Japan's policy towards the acceptance of foreign workers, Japan has initiated reconsideration of its policy. (The current discussion in the Council on the Movement of People Across Borders, Ministry of Foreign Affairs). In the long run, the government is foreseeing the following prospects. It is imperative that Japan deals with the aforementioned issues so as to accept highly skilled, competent human resources from abroad. In so doing, the foreigners should be treated fairly and equally during employment. It is necessary that the acceptance and the employment of the foreign workers are equitable.

For instance, the longest duration of the resident status should be extended to five years from the current three years. Furthermore, the process of acquiring "settlement" or "permanent residence" status should be facilitated after the renewal. The labor laws allow labor contracts of as long as five years (Labor Standards Law Article). The employers must be obligated to apply for membership to social insurance plans for their workers. One problem relevant to this issue is that foreign workers are reluctant to become members of insurance programs because they are obligated to pay 50 % of the insurance fees for government managed pension plans and health insurance plans from their incomes, while they want to send remittances or save their incomes as much as possible. This point should be taken into serious consideration.

By the way, even there are so many regulations to reduce the numbers of foreign workers but still there must be a regulation to protect the rights of foreign workers. Hence, the Japanese government is currently aiming to sign the portable pension agreement with as many nations as possible. Japan has already concluded the agreement with countries such as the United States, England, Germany, and South Korea. In response to the fact that more than 60 % of young foreign workers have medical problems due to their disregard for their health, overpowered by their intention to earn as much as they can, employers need to apply for health insurance for their employees, provide physicals, and assure worker safety. The Japanese government, both at the national and local levels, must deal with the obstacles which discourage the children of foreign nationals to receive proper education, including thorough measures for securing parents' responsibility to send their children to school.

In order to promote more human exchanges from East Asian countries in the future, today the Economic Partnership Agreement (EPA) negotiations are under way, pushing for the wider acceptance of foreigners of particular areas, including medical and health areas. For this matter, the procedures concerning the extension of stay need to become more transparent and simplified. Enhancing the internship and on-the-job training systems and handling them in a strict manner will enable us to accept people from a wider range of professions and areas in the long run. Similar to the Western industrialized countries, Japan needs to abolish illegal migrant workers. In addition, Japan has to obligate foreign residents to become members of social security and pay taxes. Because there is no administrative body dealing specifically with the policies regarding foreign workers in Japan, it is indispensable for the Japanese government to establish one.

# 5.4 Limitations of the Study

This paper examines the effect of foreign labor to Malaysia. Therefore analysis shows that there are positive and negative impacts towards Malaysia when there are migrant of labor from overseas. For the positive view is by investing the economy growth for 30 years with the entries of foreign labor. Hence, it is difficult to find the accurate data of the number of foreign workers in Malaysia for the early 15 years of the investigation where is from (1981-1996). Meanwhile, if there is data of foreign labor for the current year but it is only the number for legal foreign workers but in the real there are so many workers using fake document to enter Malaysia.

Besides that, to check with negative impact which is by unemployment rate and crime, there is limitation of data on the crime. The analysis will be accurate when the data of crime which involve by the foreign workers only but in this analysis the data is overall crime happen in Malaysia, these variable plays role just as a proxy. Limitation without the accurate data leads to failure in getting the accurate results as well.

# 5.5 Suggestions for further study

In this study, time-series data has been used for estimation. However, there are some econometric methods that are more appropriate and beneficial to use. So, to make the study more beneficial, future researcher could attempt to perform the application of Vector Autoregressive Regression (VAR) method to generate impulse response function and variance decomposition to trace the Foreign Labor Entry: Effect on Unemployment, Economy Growth and Security Implication in Malaysia. With increase of variable to determine the relation and it is advisable to use accurate data too.

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