

**THE DETERMINANTS OF FOREIGN LABOR ENTRY AND
WHITENING PROGRAM**

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MASTER OF ECONOMICS

**UNIVERSITI UTARA MALAYSIA
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WHITENING PROGRAM**

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Project Paper submitted to the School of Economic, Finance and Banking in partial
fulfillment of the requirement for the
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**UNIVERSITI UTARA MALAYSIA
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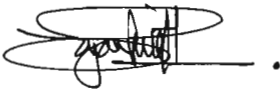
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Abstract

The trend of foreign labor entry in Malaysia has increasing over time. But, since implementation of Whitening Program the number of foreign labor in the country had decreases. Thus, this paper aims to examine the determinants of foreign labor entry and analyse the impact of Whitening Program by using yearly data from 1997 until 2012. This study employed Ordinary Least Square (OLS) to regress selected variables that have been chosen. The dependent variable in this study is foreign labor (FL) while gross domestic product (GDP), consumer price index (CPI), wage, unemployment and job opportunities are independent variables. The empirical result shows that foreign labor entry has positive relationships with gross domestic product (GDP), unemployment and wage. Consumer price index (CPI) and public security are significant and found to be negatively related with independent variable, while job opportunities turns out to be only variable which is not significant. By using Breusch-Pagan-Godfrey to test Heteroscedasticity and serial correlation found that the model is homoscedasticity, no serial correlation and normally distributed. Discussion from the Whitening Program found that there is decreasing number of foreign labor entry in Malaysia after the implementation of this program. Thus, this program is effective in reducing foreign labor entry in Malaysia.

Abstrak

Trend kemasukan buruh asing di Malaysia telah meningkat dari masa ke masa. Tetapi, sejak pelaksanaan Program Pemutihan bilangan pekerja asing di negara ini mencatatkan penurunan. Oleh itu, kajian ini bertujuan mengenal pasti faktor penentu kemasukan pekerja asing dan menganalisis kesan Program Pemutihan dengan menggunakan data tahunan dari 1997 sehingga 2012. Kajian ini menggunakan kuasa dua terkecil (OLS) untuk menganalisis regrasi bagi pembolehubah terpilih. Dalam kajian ini pekerja asing (FL) bertindak sebagai pembolehubah bergantung manakala keluaran dalam negara kasar (KDNK), indeks harga pengguna (IHP), gaji, pengangguran dan peluang pekerjaan adalah merupakan pembolehubah bebas. Hasil kajian menunjukkan bahawa kemasukan buruh asing mempunyai hubungan positif dengan keluaran dalam negara kasar (KDNK), pengangguran dan gaji. Indeks harga pengguna (IHP) dan keselamatan awam adalah signifikan dan didapati berhubungungan negatif dengan pembolehubah bebas, manakala hanya peluang pekerjaan pembolehubah yang tidak signifikan. Dengan menggunakan Breusch - Pagan - Godfrey untuk menguji Heterocedasticity dan korelasi bersiri mendapati bahawa model adalah homoscedasticity, tiada korelasi bersiri dan agihan normal. Perbincangan daripada Program Pemutihan mendapati bahawa terdapat penurunan kemasukan pekerja asing di Malaysia selepas pelaksanaan program ini. Oleh itu, program ini berkesan dalam mengurangkan tenaga kerja asing di Malaysia.

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CHAPTER 1

INTRODUCTION

1.0 Introduction

Foreign labor entry in Malaysia is not a new issue because the first entry was when British had imported labor from China and India to work in tin mines for Chinese and Indian in plantation.

In this chapter, section 1.2 present an overview on background of the study. Section 1.3 will explain factors of migration, section 1.4 discussing on Whitening Program in reducing number of foreign labor entry. Section 1.5 on problem statements which elaboration on the issue that should be study. Objective of the study is explained on section 1.6; section 1.7 is significant of the study on why this issue should be arising. The last section or section 1.8 is organization of the study.

1.2 Background of the Study: Foreign Labor Entry

The presence of immigrants is not a new issue in our country. Malaysia has started to recruit foreign labor from the time of British rule. The labors were brought from China and India to work in the mining and farming. Laborers who came from China working on mines, tin and their temporary contract laborers who came from southern India is to build roads and railways and operate rubber plantations and oil palm estates (Zehadul, 1999). Recruitment of foreign workers in Malaysia by the employer is under the Department of Immigration and National Registration.

The occurrence of the labor entry in a country clearly shows that a country is rapidly developing. So this shows that our country, Malaysia is a developing country. But it's not one thing that would have been proud. Most but not at all countries are party to international labour migration either as labour exporters, importers or both as in the case of Malaysia. However, in the context of our country Malaysia, the presence of most of the foreign labor force is what has contributed to national development. Therefore, foreign labor is needed by our country that was in the process of transition from economic dependence on agriculture to the industrial and services sectors.

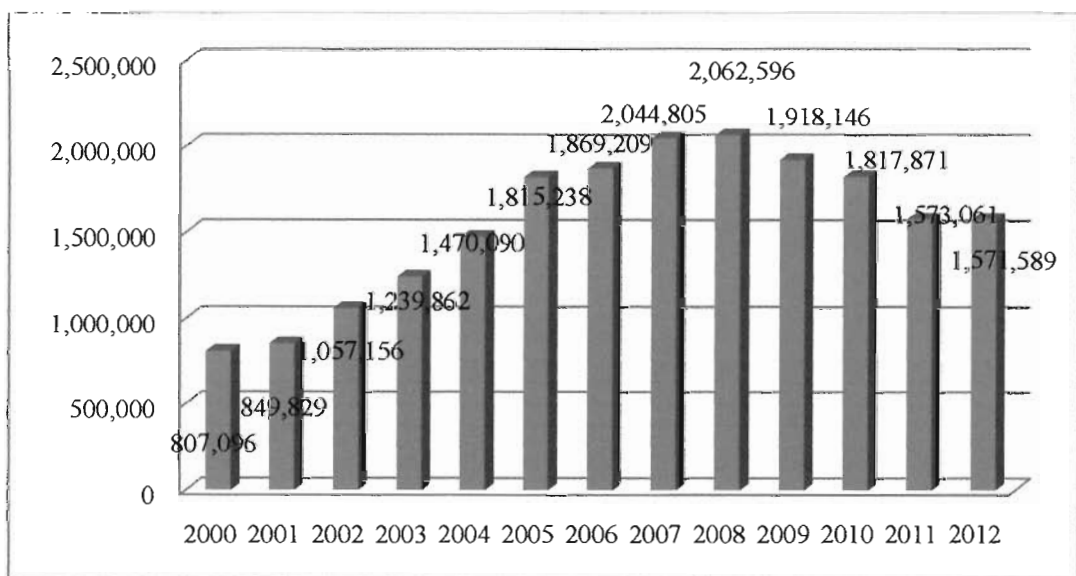
According to the Immigration Act 1959/63 (Amendment 1997), workers who violate the conditions, including working without permit approval will be sent home. A while employers will be fined. However, the Immigration Department has set out four sectors are allowed to recruit foreign workers because of labor shortages is available for these sectors is critical. These sectors are:

- a) The construction sector.
- b) The plantation sector.
- c) The services sector such as cargo operations, cleaning, laundry workers, welfare homes, and golf clubs (caddies), the hotel industry.
- d) The only export-oriented industries.

The country's healthy economic situation provides many job opportunities to the people. This situation has attracted many foreigners to seek employment and it was found that 20% of the jobs are being occupied by foreign workers (Noridah, 2010). As of May 2011, Malaysia has approximately 1.9 million foreign workers spread across

sectors such as manufacturing (39%), construction (19%), plantation (14%), housemaids (12%), and services (10%), with the rest in agriculture. The contributing countries by rank are: Indonesia (50.9%), Bangladesh (17.4%), Nepal (9.7%), Myanmar (7.8%), India (6.3%), and the rest from Vietnam. Home Minister Datuk Seri Hishammuddin Hussein had announced that the government plans to reduce the number of foreign workers to 1.5 million in three years (Asrul, 2011). If we were to account another 2 million illegal foreign workers, the number is explosive considering Malaysia such a small job market.

Figure 1.1 shows clearly the total foreign labor entry is increasing. In 2000, the number of foreign labor in the country is only about 807 096 people and they are increasing to 1,571,589 people in year 2012, even in the period they are decreasing number of foreign labor from year 2008 until the end of year analysis 2012.



Source: Immigrant Department of Malaysia.

Figure 1.1: Total Admissions Number of Foreign Labor in year 2000-2012

Table 1.1 and 1.2 are presented five countries that supply the most foreign labor to Malaysia by country and sector in year 2011. Nearly half of the foreign labor was from Indonesia which is the highest percentage or 48.95% and only 5.87% of them are Indian. As for sectors manufacturing is the highest sector that hired foreign labor as much as 37.38% and the least is services sectors which only 8.34%.

Table 1.1: Total Number and Percentage of Foreign Labor by Country in Year 2011

Country	Indonesia	Bangladesh	Nepal	Myanmar	India	Total
Total	792,809	319,475	251,416	160,504	95,112	1,619,316
Percentage %	48.95%	19.73%	15.53%	9.91%	5.87%	100.00%

Source: Immigrant Department of Malaysia.

Table 1.2: Total Number and Percentage of Foreign Labor by Sectors in Year 2011

Sectors	Total	Percentage
Maid	190,129	11.74%
Construction	220,395	13.61%
Manufacturing	605,365	37.38%
Services	135,107	8.34%
Plantation	257,522	15.87%
Agriculture	210,798	13.02%
Total	1,619,316	100.00%

Source: Immigrant Department of Malaysia.

1.3 Factor of Migration

Malaysia as multi-ethnic population is an evidence of the migration occurrence. Migration of labor in Malaysia began in the 19th century when the country was under colonial rule. The development of plantations, tin mines, infrastructure (roads and railways), and the distribution and services sectors all depended on immigrant labor from India, China and Indonesia. The colonial government and the private sector played an important role in this process. The demand for labor was fulfilled by immigrant workers brought in through formal and informal systems of recruitment and repatriation like the indentured labor and kangani systems for Indians and credit ticket of the Chinese. These immigrant workers become permanent residents and part of the Malaysian society. Their descendants became citizens of the country.

After independence Malaysia's rapid economic development relied as much on immigrant workers or foreign labor from Indonesia, Thailand, Philippines and other Asian countries. The refusal of local residents working in the plantation sector, manufacturing, mining and construction has led the Malaysian government proactive policy on hiring foreign workers, especially from Indonesia.

Factors that attract foreign labor to their destination country of which are economic prosperity, higher wages, education and training opportunities during work more better, political stability and a liberal immigration policy. Lee (1996) analyzes migration in the context of the country of origin and destination countries and the relationship between the two countries. The shortage in the country of origin and advantage of the destination country will stimulate labor to

migrate. The distance of migration between the two countries are consist the cost and some obstacles.

The cost of migration is forced to bear the cost of the transfer, the cost of searching for information on jobs and accommodation costs. The difference in language and culture as well as strict immigration control policy is a barrier to migration from occurring. But the language, history or culture of the same and there are relatives and friends in the country of destination are the factors that would stimulate international migration. Due to the similarities between Indonesia and Malaysia that is why the highest number of foreign labor is from Indonesia.

The “push” and “pull” factors at the international level in the region also caused foreign labor to immigrate into Malaysia for employment. The accelerated economic development programmers and the sustained high economic growth rates in Malaysia over approximately three decades caused the influx of migrant workers to meet the increasing demand in the Malaysian labor market. The incidence of foreign labor, especially from Bangladesh, Indonesia, Myanmar, Philippines and Thailand, in Malaysia has been the focus of debate in recent times. The implementation of several strategic infrastructure development and urban development projects increased the demand for labor, especially in the construction sector.

Further, adjustment by Malaysian workers to better economic opportunities between the industrial sectors in the economy also saw other sectors such as plantations, forestry and services sectors experiencing labor “shortages”, in example, inadequate

numbers of workers responding to the wage levels and conditions of employment offered by employers in the respective industries or sectors.

The demand for domestic maids and assistants increased with rapid urbanization, greater participation of women in the labor market and better income opportunities for Malaysians. This demand was initially met by women and men from rural areas but is now fulfilled by women and men from neighboring ASEAN countries. Hotels, restaurants and other enterprises in the hospitality industries also rely on foreign workers, especially for jobs on the lower rungs of the hierarchy or in some skilled occupations like chefs.

Apart from these sectors, we also see a trend of “shortages” in the skilled categories of labor. For example, the expansion of private medical health care has created an increased demand for paramedical staff such as nurses. Today, the country has to rely on foreign labor skilled health care workers to meet this demand. The rapid expansion of the manufacturing sector created an increased demand for workers in the various manufacturing industries, especially textiles, electrical goods and electronics.

There is also a rapid expansion of small and medium-sized industries in the food, furniture and metal fabrication enterprises. These industries have created an increased demand for skilled and semi-skilled industrial workers. Foreign labor make up for “shortages” in these industries. Today, it is obvious that foreign labor is part of Malaysian society. The number of foreign labor in the country can only be estimated, and several figures have been put forward from time to time.

1.4 Whitening Program

Media Press Total Solutions Program Migrant Workers and Illegal Immigrants (6P) on
23 June 2011

- 1. Special Meeting of immigrants chaired by Deputy Prime Minister, Tan Sri Haji Muhyiddin Hj Mohd Yassin held yesterday decided that a program package that incorporates several recommendations made by Comprehensive Settlement Programme Against Illegal Immigrants (PATI) or short 6P program will be implemented effective July 11, 2011 as the latest approach by the Government to strengthen the management of foreign citizens in Malaysia.*
- 2. Through this program, illegal immigrants will be prompted to perform the registration at any location specified government registration, and there after submit their personal information data to be considered for the whitening process (changed status to illegal workers). However, the offer to come to the registration process will only be for a limited period of two weeks, before all the information is processed and considered for approval Whitening. The 6P program is also at the same time is the last platform of each employer in the country to register their illegal foreign workers legally - before the integrated enforcement program implemented on a large scale government.*
- 3. The rationale for this 6P program would be for the purpose of obtaining a statistical estimate of the number of illegal immigrants in Malaysia, and collect their personal information, including biometric data (finger marks 10 right and left). Under 6P Programme, the Government will identify the needs of the workers needed each sector may be allowed to hire foreign workers in this*

country. Based on available data, the number of vacancies to be filled by immigrants who registered through the 6P program, thus freezing the hiring of new foreign workers continues to source from abroad for the period. Thus , 6P is reasonably intended to strengthen the management of foreign nationals in the country, helps to regulate the entry of new foreign workers into the country, facilitate the management of this country's economic activity and help control the growth of crime in this country.

4. *6P program involves six stages, Registration, Whitening, Amnesty, Monitoring, Enforcement and Repatriation¹¹. The first stage of the 6P registration will be implemented effective on July 11, 2011. Following this, the Government will appoint a number of companies and managers associations as the implementing agent. The appointment will be made through the evaluation of the companies that have applied officially to the Ministry of Home Affairs (MOHA) as the tender offer displayed on the website of the Ministry in 7 to June 10, 2011.....*

Source: News Portal Ministry of Home Affair, <http://portal.ikdn.gov.my/>

1.5 Problem Statement

Malaysia as multi-ethnic population is an evidence of the foreign labor entry occurrence. Foreign labor entry in Malaysia began in the 19th century when the century was under colonial rule. But now, foreign labor entry is not like before. Their entries are worldwide, legal and illegal and also they are from many countries. At one time, they are excess in foreign labor because other sector which not “in need” for foreign labor

also employed foreign labor due to low wage and they are willing to work more. It is interesting to know the factors that influence this foreign labor to come and work in Malaysia. Due to that Malaysian Government had implemented Whitening Program to reduce number of foreign labor in the country but the same program had been implemented many times before. Thus, this paper should examine the factors that attract the entry of foreign labor and the impact of the Whitening Policy that has been implemented to control the influx of foreign labor.

1.6 Objective

The general objective is to study the determinants that attract foreign labor to Malaysia and impact of Whitening Program in reducing number of foreign labor in Malaysia.

The specifics objectives are:

1. To investigate the trend of foreign labor entry in Malaysia.
2. To identify determinants of foreign labor entry in Malaysia namely GDP, CPI, wage, unemployment, job opportunities and public security.
3. To discuss the impact of Whitening Policy on foreign labor entry.

1.7 Significant of the Study

Malaysia highly aware unskilled and semiskilled foreign labor had contributed positively to Malaysia's economic growth. They are willing to work at low pay, tough work, involve 3-D jobs (dirty, dangerous and difficult) and they filled the gaps in sectors

where there are shortage for labor (jobs that Malaysian no longer want). But their presence also contributed to rising crime rate, eradicated diseases and clan conflicts (fights between workers of different nationality).

The Malaysian economy is now at the stage that needs to restructure in order to broaden the base for sustainable expansion. Malaysia should move from labor intensive to higher value added process. Based on the experience from other countries, there is convincing evidence when a country has high dependency on cheap foreign labor it will hinder or retard such restructuring process and also lowering level of labor productivity.

This study is important to investigate factors that attract foreign labor to come to Malaysia. Malaysia as a peace country it is really suitable for foreign labor to come and work. Thus, this study can give a signal on which selected determinant most significant on foreign labor entry in Malaysia. As a developing country we need immigrant both skilled and unskilled labour so we can change our status to developed country. This study can contribute to Malaysia government to control and build a suitable policy so that foreign labor stays in appropriate rate. Other than that, the analysis of Whitening Program on foreign labor can give a picture of effectiveness of the policy that have been taken by government in controlling the foreign labor in our country.

1.8 Organisation of the Report

This report has five chapters as a total. Chapter 2 discusses on the literature review that related to this study. Chapter 3 explains the method that will be use in the study, and data that have been collected. Chapter 4 will present the answers to all the objective of

the study which the first is to investigate the trend of foreign labor entry in Malaysia. Second is, to identify determinants of foreign labor entry in Malaysia such as GDP, CPI, wage, unemployment, job opportunities and public security and third is to discuss the impact of Whitening Policy on foreign labor. The last chapter concludes the study and recommendation on how to reduce Malaysia dependence on foreign labor.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter focus on the discussion of previous study from theoritical and emperical which related to the foreign labor base on academic journal. Theoritical reviews are divided into three sections which are factors that attract foreign labor in section 2.2.1, impact of foreign labor in section 2.2.2 and the last section 2.2.3 is foreign labor in Malaysia. Emperical review is divided into two that is empirical study according to Malaysia and other countries.

2.2 Theoritical Review

The trend of migration nowadays is changing since the migrant workers are not only considering European and American countries as a target of destination but also considering some Asian countries such as Gulf States, Japan, Malaysia, and Singapore (Piper, 2004).

In Classical Theory Disclaimer and Tow, the entry of foreign labor to Malaysia can be seen as moving in response to several factors. The determinants of classical theory of migration see the push and pull factors influencing international migration (Ravenstein 1885; Lee 1966; Cadwallader 1989; Warnes & Ford 1995; Rees et al. 1996). Push and pull theory considers the interaction between the factors that push migrants from the country of origin and the factors that attract

migrants to the country of destination. Push factors include the situation in the country of origin, such as unemployment and high poverty levels, lack of opportunity for self-development, lack of agricultural land, political instability and war, which stimulate labor to migrate to the country of destination.

2.2.1 Factors that Attract Foreign Labor

Factors that attract foreign labor to destination country of which are economic prosperity, higher wages, education and training opportunities during work more better, political stability and a liberal immigration policy. Lee (1996) analyzes migration in the context of the country of origin and destination countries and the relationship between the two countries. The shortage in the country of origin and advantage of the destination country will stimulate labor to migrate.

The distance of migration between two countries consists of cost and some obstacles. The cost of migration is forced to bear the cost of the transfer, the cost of searching for information on jobs and accommodation costs. The difference in language and culture as well as strict immigration control policy is a barrier to migration from occurring. But the language, history or culture of the same and there are relatives and friends in the country of destination are the factors that would stimulate international migration.

Illegal foreign labor tends to arrive in larger numbers when the U.S. economy is booming (relative to Mexico and the Central American countries that are the source of most illegal immigration to the United States) and move to regions where job growth is

strong. Legal immigration, in contrast, is subject to arbitrary selection criteria and bureaucratic delays, which tend to disassociate legal inflows from U.S. labor-market conditions (Martin, 2006).

2.2.2 Impact of Foreign Labor

According to the study of migration flows will increase in future if the decline and attract more suppress the population of an area immediately moved (Kliot, 1995). This leads to purposes where social-economic problems, political and getting worse an environment. The more interactivity people will move out of areas in trouble. This provides an indication if the problem of poverty and the standards of living low cannot be reduced in a country is its people will moved out and will make every effort to enter Malaysia for example, to seek employment and better income for themselves and their families. Malaysia's readiness to employ foreign workers to meet the shortage of mankind has created many problems for the country and the society of Malaysia.

Although as according to the report of The Global Commission on International Migration 2003 international migration of foreign labor can play a positive role in the development process human population to benefit the rich and poor (United Nations 2005). However, if the employment of foreign labor for permanent of course it will cause problems of socio-economic and political complicated and to prevent the formation of multi-ethnic or multi-racial society heterogeneous as trying to avoid by the countries of Western Europe and Telok (Weiner, 1990).

2.2.3 Foreign Labor in Malaysia

The presence of immigrants is not a new issue in our country. Malaysia has started to recruit foreign labor from the time of British rule. When the labors brought from China and India were in to work in the mining and farming. Laborers who came from China working on mines, tin and their temporary contract laborers who came from southern India is to build roads and railways and operate rubber plantations and oil palm estates (AHM Zehadul, 1999). Recruitment of foreign labor in Malaysia by the employer is under the Department of Immigration and National Registration.

According to (Aryani, 2003), the employer against the implementation of the minimum wage for private sector because it would cause the employer to incur high costs in terms of payment of salaries. He added that currently there are 1.8 million foreign workers in Malaysia, 39 percent from it were in manufacturing, 19 percent construction, 14 percent agriculture, 12 percent of domestic helpers, 10 percent of service, and the rest in agriculture. According to the country, the people of Indonesia covers 50.9 percent, Bangladesh 17.4 per cent, 9.7 per cent of Nepal, Myanmar, 7.8 percent, India 6.3 percent and the rest of Vietnam.

Global traffic of workers out of Malaysia also causes “shortages” in specific sectors of the economy. Influx of foreign labor migrants to Malaysia, especially from Indonesia have occurred since the 1980s and the numbers continue to increase substantially and significantly in 1990s (McCall 1995: Hugo 1993).

Admittedly, foreign labor also has something to contribute to the economic development of Malaysia. They are willing to work with low wages and work in sectors

that face labor shortages in construction and plantation sectors. They are willing to work in the dangerous, dirty and difficult. They also could have contributed to the decline in the inflation rate because of low wages, which in economics is called cost-push inflation.

The project under the 10th Malaysia and Economic Transmation Programme (ETP) include Mass Rapid Transit (MRT) need about 130,000 skilled construction workers (Sazali, 2011). The Malaysian construction sector is now experiencing critical shortage of workforce (Wong, 2011). Datuk Thomas George said, of the total workforce of 11.3 million available in Malaysia, 2.2 million are foreigners.

To reduce Malaysia's position is too dependent on foreign labor and to protect employment opportunities for local people, the government decided to gradually reduce the current dependency on foreign labor from 2.2 million to 1.5 million by 2015 (Utusan Malaysia October 20, 2009). If look at employment of foreign labor by sector, most foreign labor employed in the manufacturing sector at 36 percent, followed by farming (24.6 percent), domestic (15.7 percent), construction (14.2 percent) and the rest in other sectors. Meanwhile, a senior Ministry of Human Resources, Ms Azizah Ariffin said foreigners took about 45 percent of new jobs created each year in this country.

2.3 Empirical Literature on Foreign Labor

Most of the findings suggest that foreign labor 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 foreign labor 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.

Konya (2000) tested the granger causality between foreign labor and long-term unemployment in Australia in the period between 1983 and 1998. Using quarterly, both seasonally adjusted and unadjusted data, she found that there was negative unidirectional granger causality, both between the seasonally unadjusted and adjusted series, running from foreign labor to long-term unemployment.

Marr and Siklos (1994) studied the relationship between immigration and unemployment in Canada using quarterly data for the period 1962 – 1990. They used Granger Causality and found that before 1978, changes in foreign labor levels did not affect the Canadian unemployment rate, but after 1978 foreign labor rates contributed to changes in the unemployment rate.

Feridun (2004) investigating *The Economic Impact of Immigration on the Host Country: The Case of Norway*. This article aims at investigating the relationship between immigration and economic development measured by GDP per capita in Norway using Granger Causality Test. The Johansen Cointegration Test reveals that there is no cointegration among the data sets. The Granger Causality Test shows positive relationship between foreign labors when the level of foreign labor increases, gdp per capita also increases.

2.3.1 Case Study in Malaysia

In Malaysia by using Average Index Formula on the employment of foreign labor at construction sites found out that poor monitoring of foreign labor employment by the authority had contributed to the influx of foreign labor in the construction industry. There were advantages of hiring foreign workers such as willingness to work under harsh conditions and disadvantages such as high cost of permit to work. Foreign workers were employed in the construction industry as the locals are not interested to undertake the construction works. (Abdul et al. 2011).

Zaleha (2011) determines the impact of foreign labor on labour productivity. This paper study on the relationship between domestic and foreign labor as well as their contribution on Malaysian manufacturing sector growth also investigated. The Cobb-Douglas Production Function is used to derive the model specification in this study. The results in this study show that foreign labor has positive and significant impact on labour productivity. Further, the study also reveals that foreign labor is neither substitutes nor complements for domestic labor.

Next, Idris and Rahmah (2006) investigate the substitutability between local and foreign labor at different job categories. They divide the job categories in Malaysia by the skill consisting semi-skilled local and foreign labor, unskilled local and foreign workers. They found that both local and foreign labors are substitutes at various job categories.

2.3.2 Case Study in Other Countries

In Singapore, one study by Chia (2011) on Foreign Labour in Singapore: trends, policies, impacts and challenges on quantitative estimates are made of demographic and labor trends. Population censuses and labor force surveys are used to assess the stocks and characteristics of the foreign population and foreign labor force. This high foreign labor ratio reflects buoyant labour demand, limited domestic labor supply with declining total fertility rate, and the lack of xenophobia and labor protectionism. Foreign labor is needed to grow the population, mitigate population ageing, grow the gdp and per capita gdp, cover shortages in labour supply and skills, act as a cyclical buffer and contain wage costs to ensure international competitiveness.

Hsino (2002), study entitle Foreign Workers Responsible for the Increasing Unemployment Rate in Taiwan? This paper investigates the current important issue in Taiwan that the irnpact of foreign labor on the rising unemployment. The results show that the introduction of foreign labor plays an important role and reduces unemployment rate at the early stage. However, over time, the importation of foreign labor seizes occupation from local unskilled labor and increase the unemployment rate among local labors. In contrast to existing literature, this paper supports the view that immigration increases the unemployment rate rate for nationals in the long run.

In Norway, Feridun (2004) investigated the link between immigration and two macroeconomic indicators, gdp per capita and unemployment in Sweden. He found that there was a positive relationship between foreign populations to GDP per capita growth.

An empirical survey has been made in Israel on a sample of thirty-six large and medium-sized home building companies in Israel. As a rule, the participating companies must employ their foreign labor legally. The results have found that nearly all low skill foreign labor in the industry were employed in the elementary construction jobs “wet job” so called because they require the use of water. In the survey, 65% of the workers in the construction were foreign labor (Shmuel, 1997). Other studies in the same country by Robert (2006) on the labor market costs of conflict: closures, foreign labor, and Palestinian employment and earnings measure the implications of the Israeli-Palestinian conflict for Palestinian employment and earnings.

The studies quantify the conflict by the frequency of temporary closures of the West Bank and Gaza Strip and the number of overseas foreign workers in the Israeli labor market. Data on Palestinian employment and earnings are taken from the Palestinian labor force survey (PLFS) of the Palestinian Central Bureau of Statistics. The PLFS micro level panel data are combined with quarterly time series data on the number of foreign labor in Israel, the number of foreign labor permits issued by the Israeli government, and the frequency of temporary closures of the West Bank and Gaza Strip, between the years 1999 and 2004.

Fixed-effects estimates which exploit the number of foreign labor permits issued by the Israeli government as an instrument for the number of foreign labor, yield large and statistically significant negative effects of the Israeli-Palestinian conflict on Palestinian employment rates in Israel and mean monthly earnings, regardless of work location (Israel or West Bank and Gaza Strip). Closures also significantly reduce Palestinian employment rates in Israel and mean monthly earnings. The impact of

foreign labor is relatively stronger than the impact of closures because foreign labor are long-run substitutes for Palestinians in the Israeli labor market while closures represent only a transitory, short-run restriction on Palestinian labor supply. However, the impact of foreign workers also reflects a permanent effect of closures.

The result of studies recently carried out in a range of OECD member countries on labor shortages and the role that migration can play to alleviate labor shortages. All the available data and research confirm that labor markets are tight in several OECD member countries, principally in the areas of advanced technology, but also relating to some unskilled occupations. However, factors such as the amount of pressure on the market, the type of shortages involved absolute and relative, short term and long term. Their key features are sectors, skill levels affected and their determinants or skills mismatch, inadequate labour supply, and persistent labour-market rigidities all vary markedly across countries.

2.4 Conclusion

There are many studies on foreign labor entry. The study has been made in many countries such as Singapore, Taiwan, Israel, and OECD countries. Many explanation on the push and pull factor of foreign labor. The previous studies also help me to choose determinants for foreign labor entry such as Martin, 2006 on GDP and Sazali & Wong, 2011 on unemployment. Lee (1996) on his discussion of job opportunities, wage and public security were defined as the factor of labor entry. Other than that, previous study can help to choose the method for this paper.

CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter consist three sections which section 3.2 discuss briefly on data analysis in this study. Section 3.3 is about justification of the variables; section 3.4 presents the research framework and section 3.5 on specification of the model. Estimation procedure is explained in section 3.6 and the last section 3.7 is the conclusion of the chapter.

3.2 Data and Analysis

This study using yearly data from year 1997 until 2012. Despite total foreign labor it also considers data of GDP, CPI, wage, unemployment, job opportunities, and public security. The data was obtained from different sources. Total foreign labor comes from Immigration Department of Malaysia and Ministry and Home Affair. Wage from Index Mundi, GDP and CPI given by Department of Statistics, public security from economic planning unit and job opportunities from Jobs Malaysia, Human Resources Department. The dependent variable is total foreign labor and the dependent variables are GDP, CPI, wage, unemployment, job opportunities and public security, unemployment rate, and wage.

The analysis of this study will be in descriptive analysis and empirical. Descriptive analysis is explanation on two of the objectives of the study that is analysis on the trend of the labor entry in Malaysia from 1997 until 2012. Other descriptive study

is tried to answer the last objective that is analysis on the impact of the Whitening Program on foreign labor.

Emperical study is to identify determinant of foreign labor entry in Malaysia such as GDP, CPI, wage, unemployment, job opportunities and public security. By using Ordinary Least Square (OLS), descriptive statistic, heterocedasticity, serial correlation and normal distribution will be tested.

3.3 Justification of the Variables

Gross Domestic Product (GDP)

Other than wage GDP also play an important role in many study. Cobb-Clark (1993) analyzes women's foreign labor characteristics using the host's country gross domestic product, income inequality, country's return to education, distance between country and the US, among other characteristics.

Wage

Wage is a very important indicator in many studies because wage can give a signal of standard of living. An economist may want to investigate whether the wages earned by natives in a local labor markets are affected by a change in the number of immigrants. Fertig and Schmidt (2000) observed that research on the driving forces of international migration emphasized economic variables (e.g., income and employment).

Unemployment rate

Optimal unemployment is an environmental tool to brake the constantly accerated growth of the GDP to maintain levels sustainable in the context of resource constraint and environmental effect on foreign workers. The impact of foreign workers on the rising unemployment has been found in Taiwan. The result clearly had shown that at first stage entry of immigrant or foreign labor helps to reduce unemployment. But, as the time past the importation of foreign labor seize jobs from local unskilled labor and lifts the unemployment rate.

In 2000, the unemployment rate stood at 3.1 percent. In 2001, the jobless rate increased to 3.6 percent, the highest level in Malaysia in 10 years. Approximately 38,000 workers were retrenched in 2001. From January to May 4, 2002, another 11,754 workers were retrenched, of whom 9,434 were employed in the manufacturing sector. Most employers cited reduction for demand of their product, company reorganization, and closure as the reasons for retrenchment.

Job opportunities

Most of the immigrant come to Malaysia is for a job and if there is job opportunities in Malaysia it will invite more immigrant to come. One of the major reasons for out-migration the lack of year-round employment in rural areas in Bangladesh. It was found from Afsar and Baker (1999) literature that the adult. Members in Faridpur and Rajbari in Bangladesh, about two fifths of the households faced lack of year-round employment.

Public Security

Public security should play an important role in this study because everyone one to be safe whether in our home or workplace. Fertig and Schmidt (2000) observed that research on the driving forces of international migration emphasized economic variables (income and employment) and neglected demographic factors (e.g., age structure, health, and life expectancy). Fertig and Schmidt argued that to predict economic variables is very difficult and that macro-economic conditions might be influenced by previous migration. The paper investigates non-economic variables as predictors of international migration or foreign labor entry.

3.4 Research Framework

From research framework foreign labor is dependent variables and GDP,CPI, wage, unemployment, job oportunities and public security are independent variables

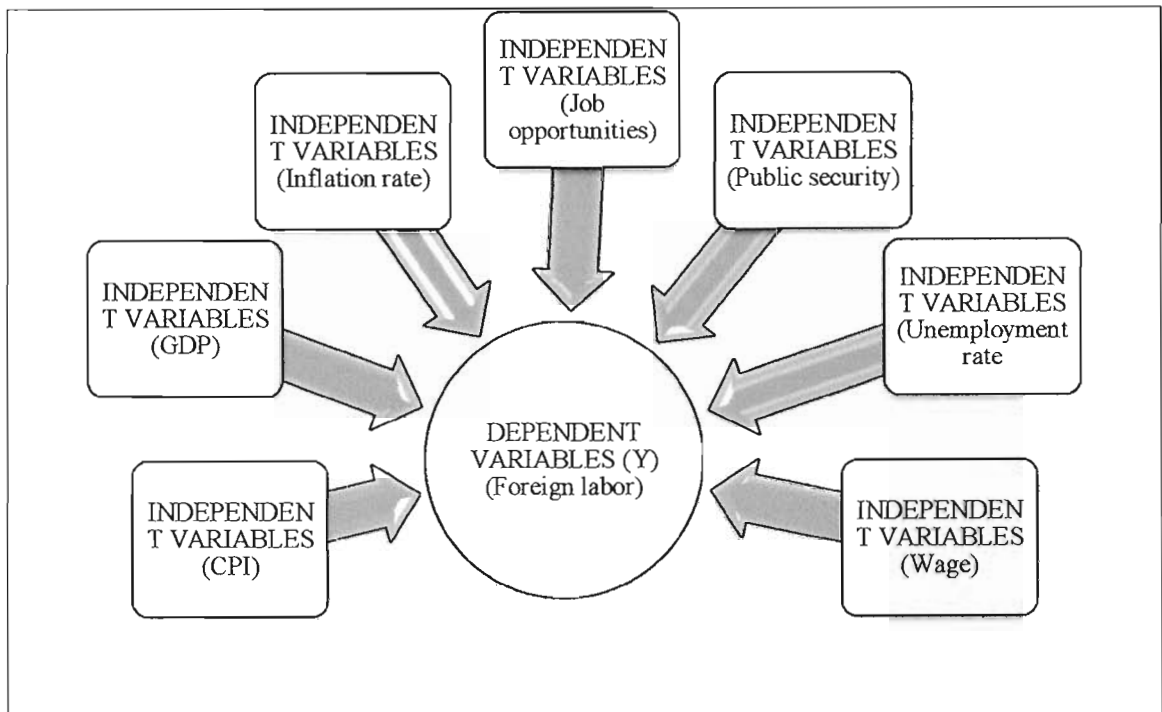


Figure 3.1: Research Framework on Determinant of Foreign Labor Entry in Malaysia

3.5 Specification of the Model

In this section an empirical model that will be estimated.

Model in this study is as follows:

$$FL = f(GDP, CPI, WAGE, UE, JO, PUB_S)$$

$$FL = \beta_0 + \beta_1 GDP + \beta_2 CPI + \beta_3 WAGE + \beta_4 UE + \beta_5 JO + \beta_6 PUB_S$$

Where,

FL= Total foreign labor in Malaysia

GDP= Gross domestic product

CPI= Consumer price index (2005 as base year)

WAGE= Wage that have been paid in Malaysia.

UE= Unemployment rate

JO= Job opportunities that have been offer to labor force

PUB_S= Public security index

3.6 Estimation procedure

This section will explain relevant econometric procedures in testing the selected variables. The econometric procedure will be used in this study is as follows:

3.6.1 Ordinary Least Square (OLS)

OLS stands for Ordinary Least Squares, the standard linear regression procedure. One estimates a parameter from data and applying the linear model

$$y = Xb + e \tag{3.1}$$

Where y is the dependent variable or vector, X is a matrix of independent variables, b is a vector of parameters to be estimated, and e is a vector of errors with mean zero that make the equations equal. OLS produces a line that minimizes the sum of the squared vertical distances from the line to the observed data points. The OLS regression model can be extended to include multiple explanatory variables by simply

adding additional variables to the equation. The form of the model is the same as above with a single response variable (Y), but this time Y is predicted by multiple explanatory variables (X1 to X3).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \quad (3.2)$$

The interpretation of the parameters (α and β) from the above model is basically the same as for the simple regression model above, but the relationship cannot now be graphed on a single scatter plot. α indicates the value of Y when all values of the explanatory variables are zero. Each β parameter indicates the average change in Y that is associated with a unit change in X, whilst controlling for the other explanatory variables in the model.

3.6.2 Heteroscedasticity Test

In statistics, a sequence of random variables is heteroscedastic, or heteroskedastic, if the random variables have different variances. The term means "differing variance" and comes from the Greek "hetero" (different) and "skedasis" (dispersion). In contrast, a sequence of random variables is called homoscedastic if it has constant variance. One of the classical assumptions of the ordinary regression model is that the disturbance variance is constant, or homogeneous, across observations. If this assumption is violated, the errors are said to be "heteroscedastic."

Heteroscedasticity often arises in the analysis of cross-sectional data. For example, in analyzing public school spending, certain states may have greater variation in expenditure than others. If heteroscedasticity is present and a regression of spending on per capita income by state and its square is computed, the parameter estimates are

still consistent but they are no longer efficient. Thus, inferences from the standard errors are likely to be misleading.

There are several methods of testing for the presence of heteroscedasticity. The most commonly used is the Time-Honored Method of Inspection (THMI). This test involves looking for patterns in a plot of the residuals from a regression. Two more formal tests are White's General test (White 1980) and the Breusch-Pagan test (Breusch and Pagan 1979).

3.6.3 Serial Correlation Test

Serial correlation is the relationship between a given variable and itself over various time intervals. Serial correlations are often found in repeating patterns when the level of a variable affects its future level. In finance, serial correlation is used by technical analysts to determine how well the past price of a security predicts the future price. The term can also be referred to as "autocorrelation" or "lagged correlation".

Correlation is a familiar concept used to describe the strength of the relationship between variables. Serial correlation (also known as autocorrelation) is the term used to describe the relationship between observations on the same variable over independent periods of time. If the serial correlation of observations is zero, observations are said to be independent. However, if observations are serially correlated, it means they don't evolve in a random process, but rather they are related to their prior values.

Serial correlation is calculated as a function of the mean and variance. If X_t is a process with mean μ and variance σ^2 (such that the observations are identically

distributed) and $E[\cdot]$ is notation for the expected value, then the mathematical definition of serial correlation is:

$$\text{SerialCorrel}(t, t-s) = \frac{E[(X_t - \mu)(X_{t-s} - \mu)]}{\sigma^2} \quad (3.3)$$

Equation 3.3 describing if the observations are independent, the serial correlation is zero. However, if serial correlation has a statistically significant difference from zero, the observations are not likely to be independent. In this case, the observations may exhibit positive or negative serial correlation, and the proportional relationship between standard deviation and the square root of time does not hold.

If observations are positively serially correlated, they are said to exhibit mean aversion. This means observations are prone to trends and returns measured over longer periods will have higher standard deviation than if the subperiod returns were independent. If observations are negatively serially correlated they are said to be mean reverting. Mean reversion indicates that observations tend towards the average value over time and returns measured over longer periods will have a lower standard deviation than if the subperiod returns were independent.

3.7 Conclusion

The test is to examine whether the model build is a good model and the independent variables have significant to the foreign labor entry. Using OLS, heteroscedasticity and other test such as serial correlation and normal distribution will be tested.

CHAPTER 4

FINDINGS

4.1 Introduction

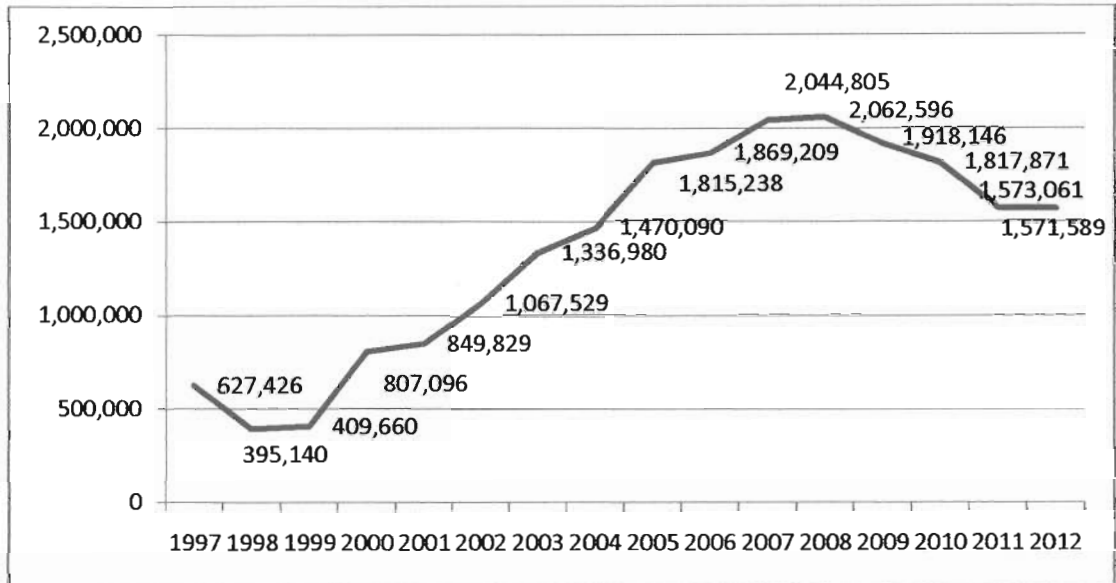
The first objective of this paper is to investigate the trend of foreign labor in Malaysia that will be discussed in section 4.1. By using Ordinary Least Square (OLS), Section 4.2 is a regression analysis on determinants of foreign labor entry in Malaysia. Section 4.4 is discussion of the impact of Whitening Policy on foreign labor.

4.2 The trend of foreign labour in Malaysia

This section will explain briefly about the tren of foreign labour entry in Malaysia since 1997 until 2012. Figure 4.1 below signalling that the entry of foreign labour from 1997 until 2012 is roughly decreasing, increasing, and then decreasing again. In 1997 the number of foreign labour is 627,426 and it is decreasing to 395,140. Malaysia was hit hard by the 1997 Asian financial and economic crisis, and the economy contracted by 7.4 percent in 1998.

During that year, the Government adopted stimulative fiscal and monetary policies to promote economic recovery and established institutions to recapitalize distressed financial institutions and to remove nonperforming loans from the banking system. In 1998 due to recession that happen in 1997 it slow the investment, economic growth finally limited the demand for foreign labour in 1998.

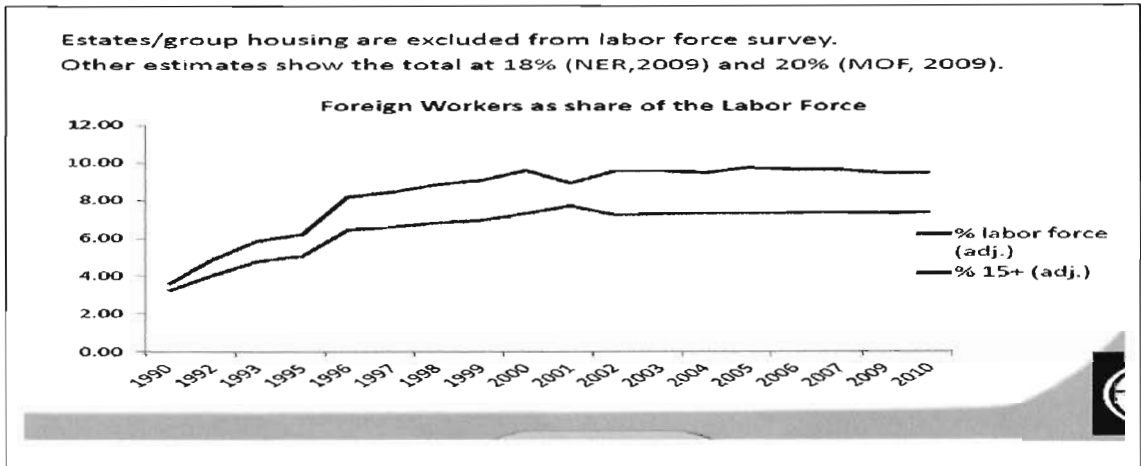
After 1998, the number of foreign labour is increasing until year 2008. But, in 2008, once again Malaysia had faced recession; the number of foreign labour is decreasing to 1,918,146 in 2009. In the next period also the number of foreign labour is decreasing year 2010 (1,817,871), 2011 (1,573,061) and 2012 (1,571,589).



Source: Immigrant Department of Malaysia

Figure 4.1: Trend of foreign labor in Malaysia from year 1997 until 2012

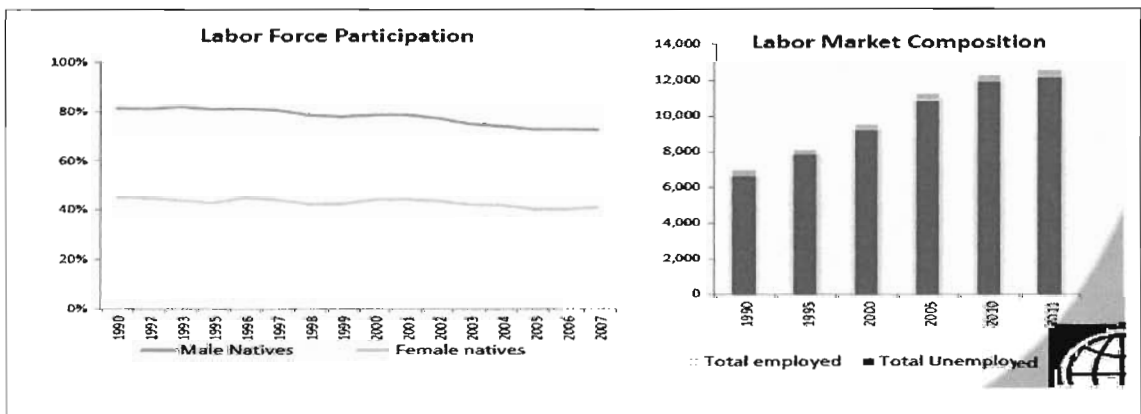
Foreign labor composes around 10% of the labor force (World Bank, 2013). Figure 4.2 show foreign labor as share of labor force since 1990 until 2010. As general the trend of participation of foreign labor in labor force is increasing.



Source: World Bank 2013

Figure 4.2: Share of Foreign Labor in Labor Force since 1990 until 2010.

Figure 4.3 shows that job opportunities in Malaysia can offer many jobs to the foreign labor. The inflow of foreign workers is largely attributable to demand factors in the domestic labor market.

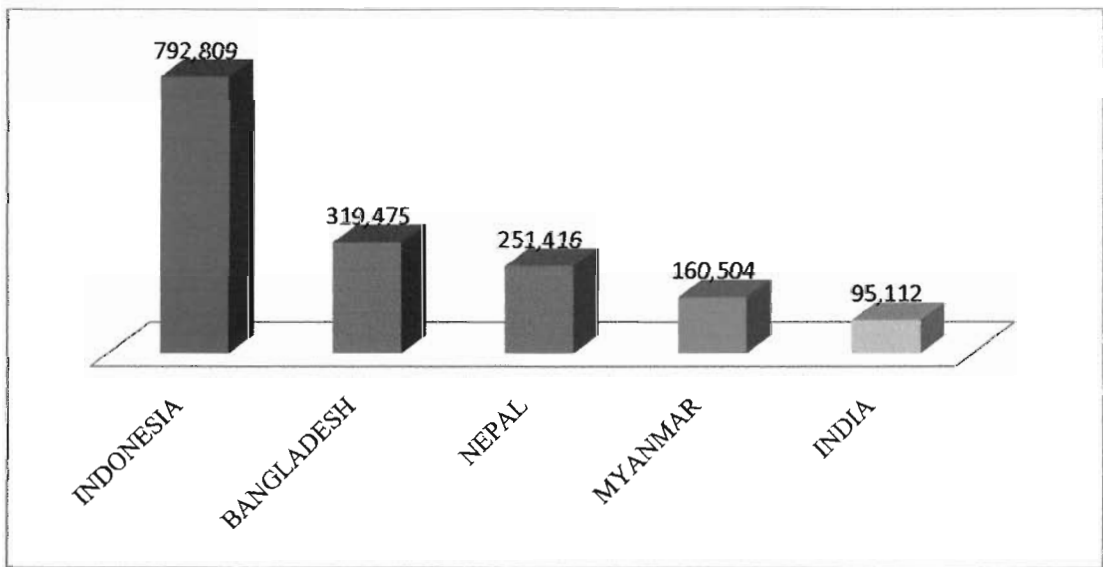


Source: World Bank Report 2013

Figure 4.3: Labor Force Participation and Labor Market Composition year 1990 until 2007

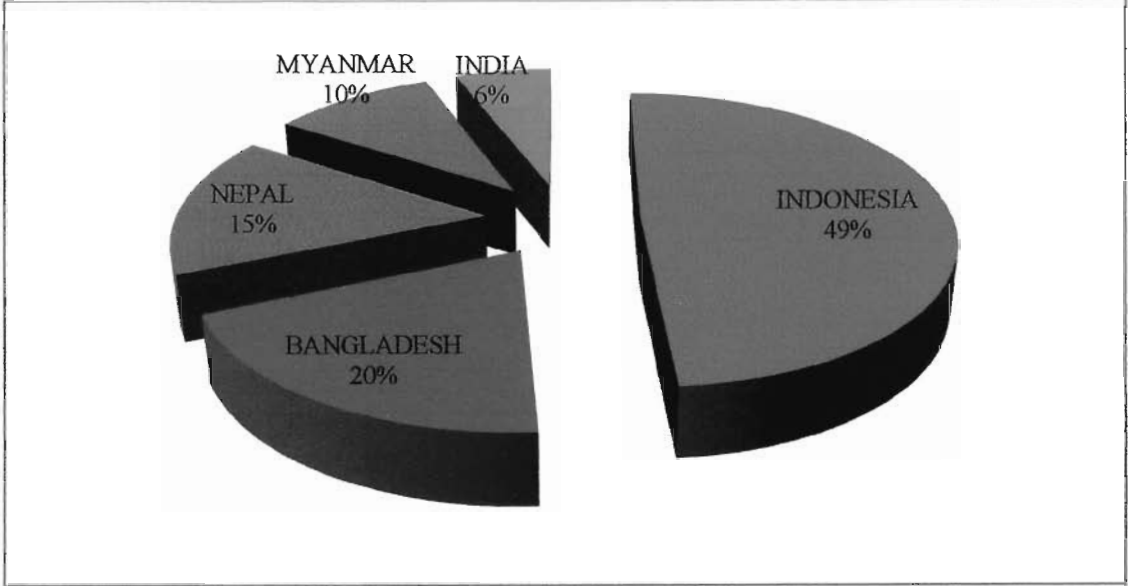
Figure 4.4 below has classify five countries that have the highest number of foreign labour in year 2011. Total number of foreign labor in 2011 is as much as 1,619,316. From that amount most of them is coming from Indonesia (792,809), follow by Bangladesh (319,475), Nepal (251,416). Only few coming from Myanmar and India is 160,504 and 95,112 respectively.

Percentage of foreign labour that year can be shown in Figure 4.4. From total number of 1,619,316 as much as 48% comes from neighbor country Indonesia, 20% is from Bangladesh, 15% from Nepal and 10% from Myanmar. Only 6% of the foreign labour comes from India.



Source: Ministry of Home Affair

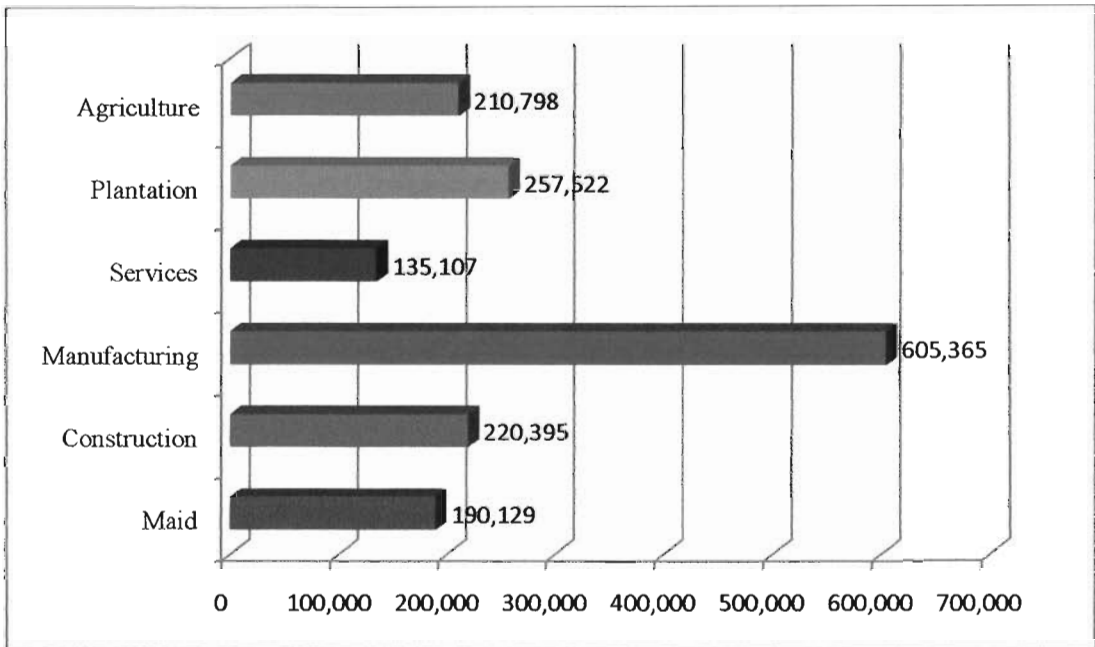
Figure 4.4: Number of Foreign Labour by Country in year 2011.



Source: Ministry of Home Affair

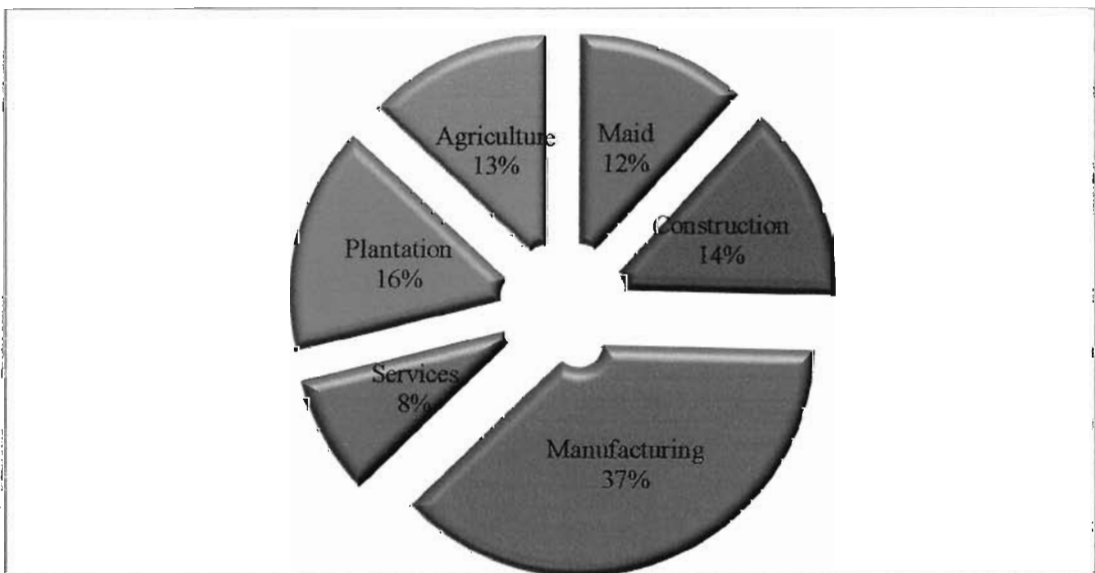
Figure 4.5: Percentage of Foreign Labor by Country year 2011.

The number of foreign labour according to economic sector in 2011 can be shown in Figure 4.6. In the figure manufacturing sector have the highest foreign labor which 605,365. The lowest two values is the labour working as maid and in services are 190,129 and 135,107 respectively. This is due to normally only women work as maid and local workers monopolise in services sector. Second highest is from plantation sector or 257,522, then construction 220,395 follow by agriculture. Percentage of foreign labour by economic sector can be shown in the Figure 4.7



Source: Ministry of Home Affair

Figure 4.6: The Number of Foreign Labour by Economic Sector year 2011.



Source: Ministry of Home Affair

Figure 4.7: Percentage number of foreign labour by economic sector

4.3 Analysis Regression on Determinants of Foreign Labor Entry in Malaysia

Below table had shown all result from regression of OLS, Descriptive Statistic, correlation matrix, heteroskedasticity, autocorrelation and multicollinearity.

4.3.1 Ordinary Least Squares

From Table 4.1 below we can claim that some of variables indicate long run equilibrium relationship exists in the variables. The relationship can be seen as:

$$FL = 4049520 + 16.61462GDP - 314829.6CPI + 402224.6WAGE + 1991948UE + 0.744266JO - 169593.0PUB_S$$

It can conclude that, result from the regression is reliable, where their computed t-statistic is greater than t-critical value by using thumb rule. We will accept the alternative hypothesis and reject the null hypothesis. Therefore, we can conclude that there is sufficient evidence to show that there is significant relationship between these variables in Malaysia. There are positive and negative relationship and also direct positive impact.

Gross domestic product (GDP) on Table 4.1 show statistically significant at 5% significant level, when GDP increase by one it will bring addition as much as 16.61 foreign labors. Unemployment and wage is statistically significant at 10% and 5% significant level respectively where unemployment and wage increase by one, foreign labor also increase as much as 1,991,948 and 402,224.6.

But as for CPI clearly shows negative relationship at 5% significant level when CPI increase by one it will reduce number of immigrant workers as much as 314829.57.

Public security that have been collected from Index Quality of Life also have negative relationship with foreign labor and statistically significant at 1% significant level when public security goes up by one it will attract as much as 169592.98 foreign labor to come and work in Malaysia.

The last variable job opportunities is not significant and gives different result from expectation when job opportunities goes up by one it decrease immigrant 0.744. Job opportunities are insignificant due to the government policy to reduce number of foreign labor in the country. Even there is a lot of job oportunites in Malaysia but government restricted their entry. $R^2 = 0.870765$ give a signal that 87% of total immigrant is explain by GDP, CPI, wage, job opportunities, and public security. The rest or 13% is explained by other variables.

Table 4.1: Ordinary Least Square Test

Variable	Coefficient	t-Statistic	Prob.
C	4049520.	0.378441	0.7163
GDP	16.61462	2.836838	0.0252
CPI	-314829.6	-2.431022	0.0454
WAGE	402224.6	2.177926	0.0658
UE	1991948.	2.571056	0.0370
JO	0.744266	1.808411	0.1135
PUB_S	-169593.0	-3.025026	0.0192
R-squared	0.870765	Durbin-Watson stat	1.604664

4.3.2 Descriptive Statistic

The mean of data or average is a sum of all data divided by number of data valued. The mean for total immigrant is 1386338 people. As for GDP and CPI the mean is 536097.3 million and 100.9779. Others wage is 77.35, unemployment rate are 3.37%, Job opportunities 713,853 and 105.78 for public security.

The median of the set data is the middle value when the data is arranged in ascending or descending order. In below table show that the median for all variables starting with foreign labor are 1,520,840 people, GDP 498246.5 millions, CPI 98.56, wage 77.4, unemployment 3.3%, 564841.0 job opportunities, and 105 public security.

The maximum of the data for total immigrant is 2,062,596 people; CPI is 119.3 and GDP 941,237 million. Wage that has maximum value that has been paid to the workers is 79.3. The highest number of job opportunities which had been offer to labor force at certain time is 2,259,548. Public security which been measured in index is 115.2 and 3.7% for unemployment rate.

Table 4.2: Descriptive Statistic

	FL	GDP	CPI	WAGE	UE	JO	PUB_S
Mean	1386338.	536097.3	100.9779	77.35000	3.271429	713853.1	105.7786
Median	1520840.	498246.5	98.56000	77.40000	3.300000	564841.0	105.0000
Maximum	2062596.	941237.0	119.3000	79.30000	3.700000	2259548.	115.2000
Minimum	395140.0	281795.0	83.55000	73.90000	2.400000	49975.00	100.0000
Std. Dev.	551424.8	210516.5	11.03244	1.551054	0.333809	702686.3	4.291526
Skewness	-0.400920	0.523912	0.251174	-0.826490	-1.170731	0.845110	0.681997

Kurtosis	1.855123	2.132609	1.975564	2.995837	4.301705	2.618241	2.892367
Jarque-Bera	1.139654	1.079343	0.759397	1.593878	4.186512	1.751506	1.092038
Probability	0.565623	0.582940	0.684068	0.450707	0.123285	0.416548	0.579251
Sum	19408734	7505362.	1413.690	1082.900	45.80000	9993944.	1480.900
Sum Sq. Dev.	3.95E+12	5.76E+11	1582.292	31.27500	1.448571	6.42E+12	239.4236
Observations	14	14	14	14	14	14	14

4.3.3 Heteroscedasticity Test

H0: There is no heteroscedasticity problem (homoscedasticity)

H1: There is heteroscedasticity problem

It clearly shown from the result, that there is no heteroscedasticity. Heteroscedasticity arise when Prob. Chi-Square is less than 5% but it is 0.7277 or 72.77% indicates that the value is greater than 5% which means there is no heteroscedasticity. So, fail to reject null hypothesis.

Table 4.3 Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.407106	Prob. F(6,7)	0.8532
Obs*R-squared	3.621539	Prob. Chi-Square(6)	0.7277
Scaled explained SS	0.337863	Prob. Chi-Square(6)	0.9993
Variable	Coefficient	t-Statistic	Prob.
C	-2.47E+11	-0.162269	0.8757
GDP	774870.8	0.931145	0.3828
CPI	-1.79E+10	-0.971604	0.3636
WAGE	2.61E+10	0.992960	0.3538
UE	1.02E+11	0.924733	0.3859
JO	42928.36	0.734103	0.4867
PUB_S	-6.67E+09	-0.837849	0.4298
R-squared	0.258681	Mean dependent var	3.65E+10
Adjusted R-squared	-0.376735	S.D. dependent var	3.27E+10
S.E. of regression	3.84E+10	Akaike info criterion	51.88657
Sum squared resid	1.03E+22	Schwarz criterion	52.20610
Log likelihood	-356.2060	Hannan-Quinn criter.	51.85699
F-statistic	0.407106	Durbin-Watson stat	2.718952
Prob(F-statistic)	0.853185		

4.3.4 Serial Correlation analysis

H0: There is no serial correlation in the model

H1: There is serial correlation in the model

Using Breusch-Godfrey Serial Correlation LM Test, this study can conclude that there is no serial correlation in this model. As can see Prob. Chi-Square is 0.5144 or 51.44% greater than 5%. Again, fail to reject null hypothesis.

Table 4.4: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.262295	Prob. F(2,5)	0.7792
Obs*R-squared	1.329378	Prob. Chi-Square(2)	0.5144
Variable	Coefficient	t-Statistic	Prob.
C	-5766259.	-0.291091	0.7827
GDP	-1.208018	-0.178226	0.8655
CPI	2483.463	0.016194	0.9877
WAGE	3747.051	0.013599	0.9897
UE	-90807.34	-0.102249	0.9225
JO	-0.072806	-0.153502	0.8840
PUB_S	58755.40	0.535224	0.6154
RESID(-1)	0.491130	0.767008	0.4777
RESID(-2)	0.394288	0.331641	0.7536
R-squared	0.094956	Mean dependent var	-9.58E-09
Adjusted R-squared	-1.353115	S.D. dependent var	198233.5
S.E. of regression	304087.6	Akaike info criterion	28.34411

Sum squared resid	4.62E+11	Schwarz criterion	28.75494
Log likelihood	-189.4088	Hannan-Quinn criter.	28.30609
F-statistic	0.065574	Durbin-Watson stat	2.186681
Prob(F-statistic)	0.999348		

4.3.5 Normal Distribution

One of the characteristic of best regression model is that the model is normally distributed. Figure 4.8 below indicates that the model is normally distributed because probability or P-value is 0.7968 or 80%. The mean of many random variables independently drawn from the same distribution is distributed approximately normally.

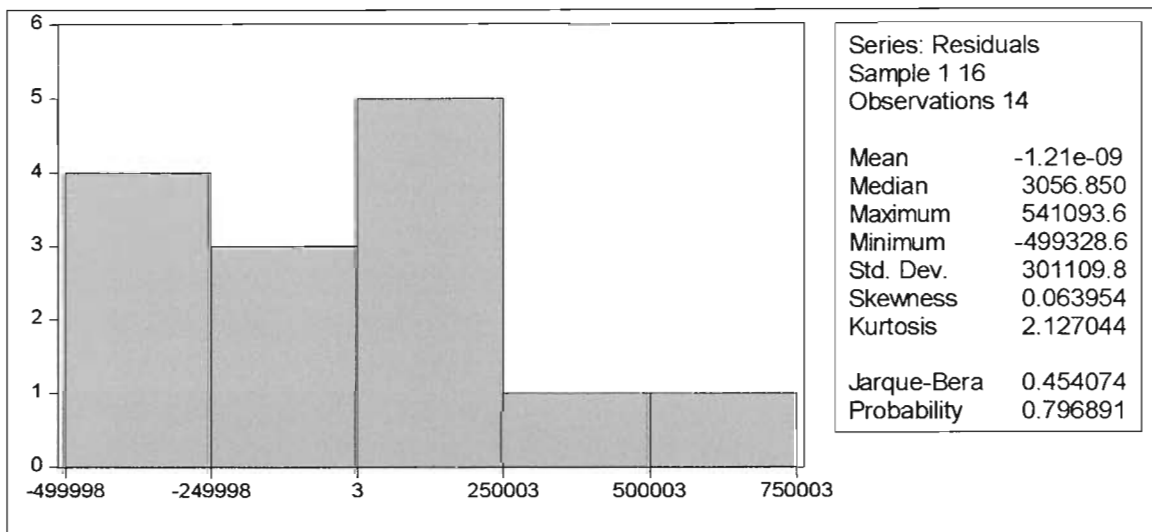
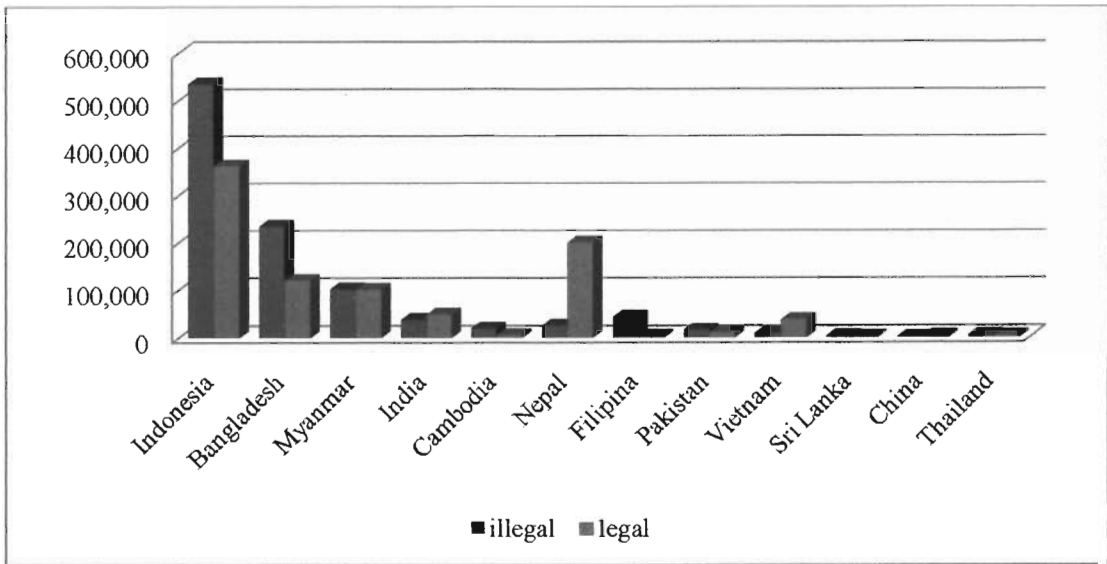


Figure 4.8: Normal distribution of mean variables

4.4 Discussion of the Impact of Whitening Policy on Foreign Labor.

As mention in Chapter 1, Whitening Program had started on Julai 2011 and based on 6P guide, immigrants can make a choice whether to continue working in Malaysia or back to their home countries after going through the registration process. After that, the immigrants who choose not to return to their country of origin, during the whitening process, the ministry screening qualified immigrants in terms of sectors and offer job vacancies. To immigrants who are not listed for legalized (as well who choose to return to their country of origin), they will be forgiven and allowed to return home on their own cost without any form of action.

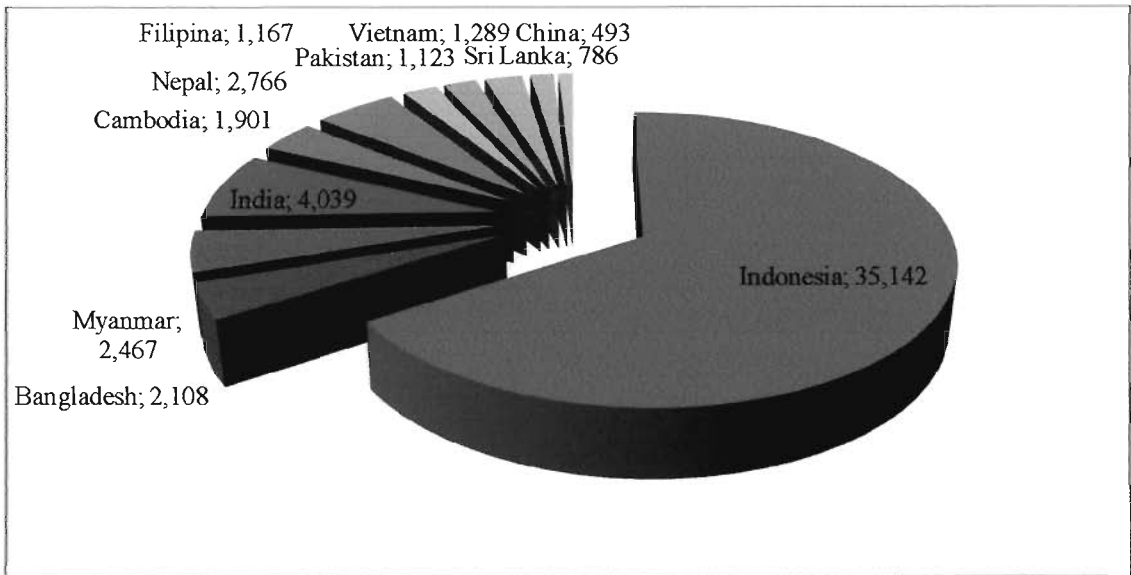
Bangladeshis were second after the Indonesians with 233,938 illegal workers and 119,960 legal workers. This was followed by Nepal (25,307 illegals and 199,416 legal), Myanmar (101,483 illegals, 100,421 legal), India (37,780 illegals, 48,383 legal), the Philippines (43,787 illegals, 4,175 legal) and Vietnam (9,301 illegals, 37,707 legal). The other countries include Pakistan (16,202 illegals, 10,662 legal), Cambodia (19,442 illegals, 5,232 legal), Thailand (5,279 illegals, 4,179 legal), China (1,634 illegals, 4,391 legal) and Sri Lanka (3,505 illegals, 2,483 legal).



Source: Ministry of Home Affair

Figure 4.9: Number of Legal and Illegal workers before 6P Program.

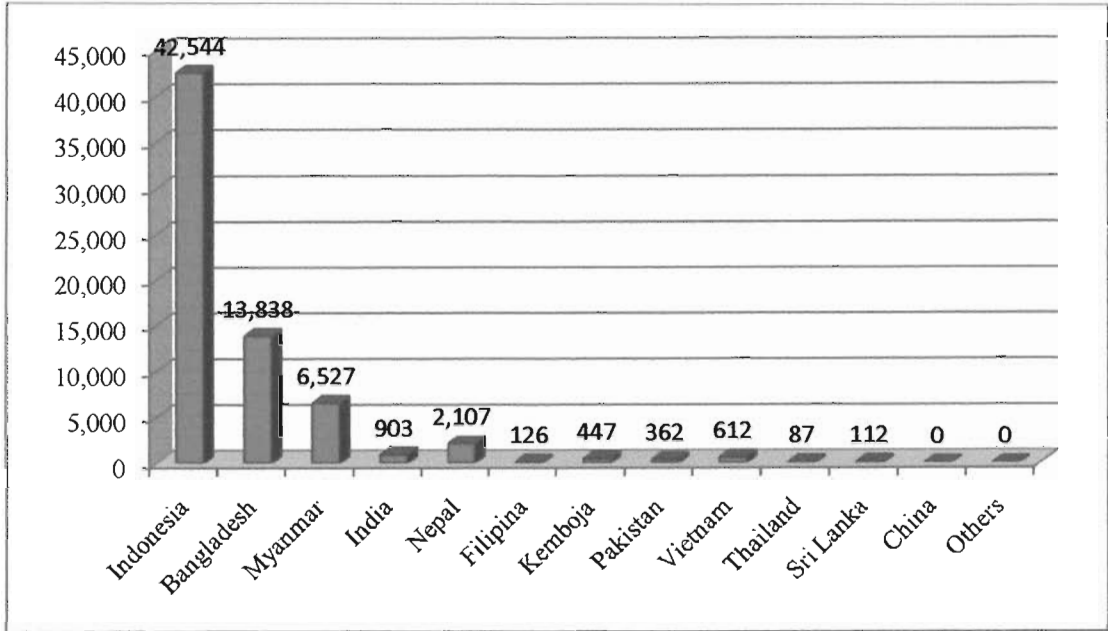
Figure 4.10 show that, a total of 53,682 illegal immigrants involved in the amnesty process under the 6P program had left Malaysia. The highest number recorded was Indonesia with 35,142 people ; followed by India (4,039), Myanmar (2,467), Cambodia (1,901), Nepal (2,766), Bangladesh (2,108), Vietnamese (1,289), the Philippines (1,167), Pakistan (1,123) : Sri Lanka (786) and China (493). What is more important is that such a large amount accounted for only 4.69 percent of the total number of registered immigrants. Having taken into account the number of immigrants who left Malaysia through the clemency process, the number of illegal immigrants estimated to decrease to 940.495 people.



Source: Source: Ministry of Home Affair

Figure 4.10: Number of illegal workers left Malaysia after 6P Program.

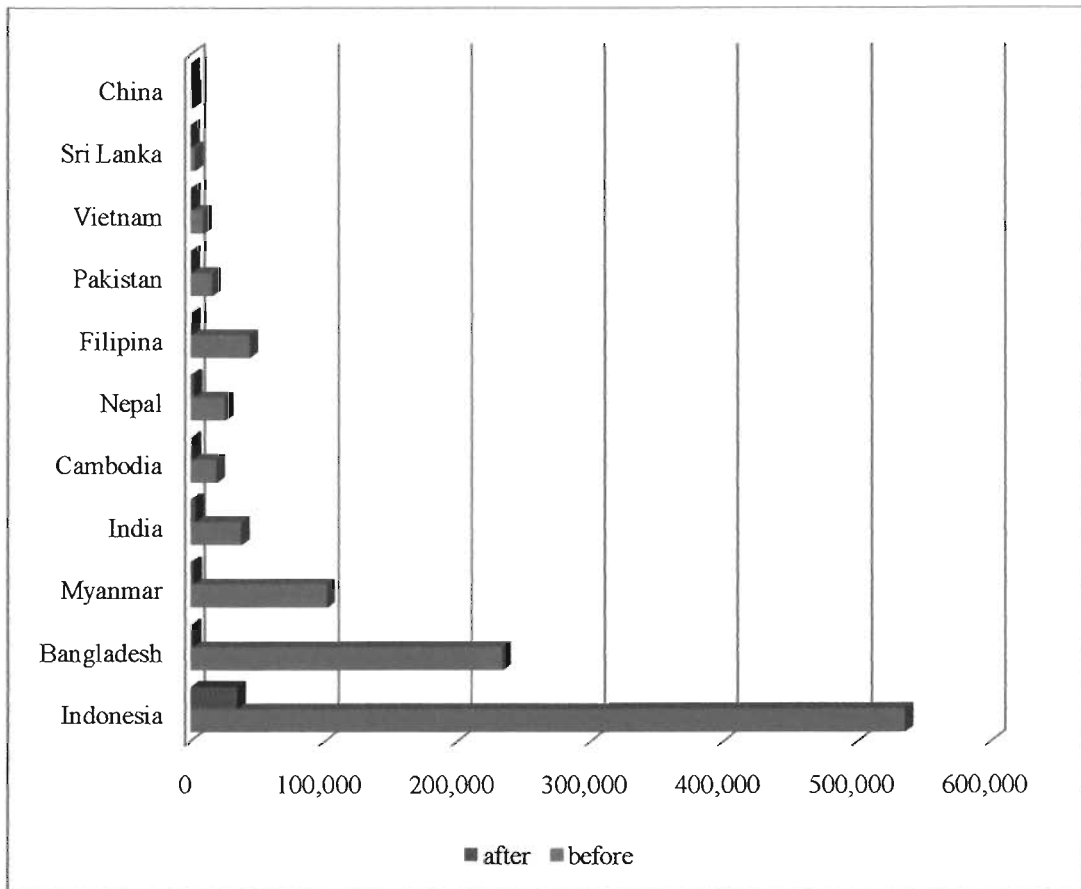
The highest total foreign labors that have undergone Whitening Program are Indonesian as much as 42,544. Second is Bangladesh (13,838), follow by Myanmar (6,527), Nepal (2,107), India (903). Other countries are below 1000 figure Vietnam (612), Kemboja (447), Pakistan (362), Philiphines (126) and Sri Lanka (112). There are also country that not yet register in this program which is China.



Source: Source: Ministry of Home Affair

Figure 4.11: Total number of Whitening illegal workers under 6P Program

Figure 4.12 had shown that the number of illegal workers has decrease after Whitening program. Number of illegal workers from their countries had reduces. From the table, the highest decreasing is from Bangladesh (99.1%) from 233,939 to 2,108. Second is then Myanmar (97.5%) from 101,483 to 2,467 then, Filipina (97.33%) 43,787 to 1,167, Indonesia (93.43%) 535,180 to 35,142, Pakistan (93.07%) 16,202 to 1,123 and Cambodia (90.22%) 19,442 to 1,901. Next is followed by country with large population or India (89.31%) 37,780 to 4,039, Nepal (89.07%) 25,307 to 2,766, Vietnam (86.14%) 9,301 decreases to 1,289 and Sri Lanka (77.57%) 3,505 to 786. The lowest decreasing is from China (69.83%) 1,634 reduce 493.



Source: Source: Ministry of Home Affair

Figure 4.12: Number of Illegal Workers before and after Whitening Program.

Table 4.5: Percentage of reducing number of Foreign Labor after Whitening Program

	Before	After	Total Number Reduce	%
Indonesia	535,181	35,142	500,039	93.43
Bangladesh	233,938	2,108	231,830	99.1
Myanmar	101,483	2,467	99,016	97.57
India	37,780	4,039	33,741	89.31
Cambodia	19,442	1,901	17,541	90.22
Nepal	25,307	2,766	22,541	89.07
Filipina	43,787	1,167	42,620	97.33
Pakistan	16,202	1,123	15,079	93.07
Vietnam	9,301	1,289	8,012	86.14
Sri Lanka	3,505	786	2,719	77.57
China	1,634	493	1,141	69.83
Total	1,027,560	53,281	1,080,841	

Source: Ministry of Home Affairs

4.5 Conclusion

Result from this study can be simplified that the number of foreign labor did increasing overtime but, recently the number is reducing especially after Whitening Program. From the OLS regression all independent variables is significant except for job opportunities

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 Introduction

This final chapter will finalise the study by summarization of the result from the finding in chapter four and make recommendation to the government, firms and societies in controlling the number of foreign labor in our contries.

5.2 Conclusion

Recent government's proposal allows foreign labor but it is restricted to only plantation, construction, services and exsport oriented industries has contributed further to the controversial debate over the large presence of foreign labor in the country. This rectricted did not go down well with a large portion of the population, already discontented over the extension of yet another amnesty that allow this foreign labor leave Malaysia without unpunished. The public fears that will lead to more influx of foreign labor unskilled and semiskilled to Malaysia. In addition, by allowing all sectors of the economy to hire foreign labor, it could affect bargaining power and job opportunities for local workers. Firms normally want to cut save cost will hired this foreign labor to gain more profit.

Malaysia already has a high number of foreign labors. Foreign labor represents 20% of total labor force and it is far higher than what the system can handle. What is worse from that 20% the pool is skewed towards the unskilled and semi skilled. Skilled labor only 3%, surely it is not percentage that could help Malaysia prepare to face the challenges from an increasing competitive global economy.

The trend of foreign labor entry in Malaysia has increasing over time. But, since implementation of Whitening Program the number of foreign labor in the country had decreases. Thus, this paper aims to examine the determinants of foreign labor entry and analyse the impact of Whitening Program by using yearly data from 1997 until 2012. This study employed Ordinary Least Square (OLS). Selected variables in this study are total foreign labor (FL), gross domestic product (GDP), consumer price index (CPI), wage, unemployment, job opportunities and public security.

In this study foreign labor (FL) acts as dependent variable while gross domestic product (GDP), consumer price index (CPI), wage, unemployment and job opportunities are independent variables. The empirical results found out there are positive and negative relationship between dependent variable and independent variables. Positive relationships are gross domestic product (GDP) and unemployment; they are significant at 5% significant level. Wage also have positive relationship and significant at 10% significant level. While for negative relationship are consumer price index (CPI) and public security which significant at 5% significant level and public security significant at 1% significant level. Job opportunities are the only variables which is not significant.

By using Breusch-Pagan-Godfrey to test Heterocedasticity and serial correlation found that the model is homoscedasticity, no serial correlation and normally distributed. Discussion from the Whitening Program found that there is decreasing number of foreign labor entry in Malaysia after the implementation. Thus, this program is effective in reducing foreign labor. This study highlights some important findings which there are:

- 1) The trend of foreign labor entry is keep increasing over time but it is decreasing after 2008. The highest number of foreign labor come from Indonesia and manufacturing sectors is the sector employed foreign labor the most.
- 2) There are strongly positive relationships between GDP, wage, unemployment, and job oportunities. When there is an increasing in this variable it with lead to increasing on the number of foreign labor. As for CPI and public security is not showing positive relationship with number of foreign labor. When there is increasing in this two variables it lead to decreasing number of foreign labor. The estimation of OLS shows that from six independent variables only one is not significant that is job oportunities. Other variables are significant.
- 3) Whitening Program is a success policy to the Malaysia since it has reduced the number of foreign labor in our country.

5.3 Recommendation

It is imposible for a country to have zero foreign labor especially ta a developing country like Malaysia which has many challenges to face as we are approaching our mission in 2020. The number of foreign labor must be in an appropriate level and the Whitening

Program is in fact a good solution in reducing number of foreign labor in Malaysia. Even the same program implemented in 1989, 1991, 1996 and 2004 had failed but we should not take it for granted to avoid such policy.

On the issue of illegal foreign labor the government should establish a memorandum of understanding (MOU) to find the precise steps to prevent illegal migration. Sending State should provide all travel documents and logistical support including shelter and transportation for them to be sent home. Government can finalise the only sector that have critical need for foreign labor and straighten the foreign labor recruitment procedures. Facilities for foreign labor, the problems faced by the employer, and the reduction of the effect of foreign labor should be the basis for all legislation and regulations to meet current demands.

Fines & Court Action to the employer is an effective system and should be established to identify all employers registered with the authorities and those who violate the law must be acted upon quickly. Ministry of Human Resources has already built many institutions to provide training for young people but, the question is the aspects of the module and re-training to suit the latest industry. Priority should be given for local employment and wages are reasonable.

The state and the institutions can working together to help unemployed youth by providing funds and training courses or short term to provide youth who are unemployed or graduate school and university students to participate in this program and the work sought work in accordance with the training which have been obtained.

On the issue of incentives, the Government and employers should provide better incentives in order to attract local workers. Government should seek consultation with trade unions such as the MTUC in the struggle of workers in the private sector. And enforcement of existing laws should be tightened, registration workers and government efforts such as forgiveness , whipping and freezing hiring new foreign workers never prevents more immigrants to make a living in this country .

Therefore, it is recommended that the authorities redoubled enforcement. Public can provide information and to cooperate with law enforcement agencies to facilitate the eradication operation from time to time. They should not be thought of reward or closing their eyes what is happening in front of them.

Systematic registration of workers and hours worked. Maybe the answer is not to the workers but to control their arrival, how to determine the job for them and may work for their visas in the country. The private sector is responsible for ensuring their employees are involved in the sector have a valid work permit and also prioritize local workers

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